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Thesis Approval

This is to certify that the thesis presented to us by Angela Tatum Fairfax

on the 2 day of May, 2003, in partial fulfillment

of the requirements for the degree of Master of Arts has been examined and is

acceptable in both scholarship and literary quality.

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DANCE/MOVEMENT THERAPY IMPACT ON QUALITY OF LIFE IN CLIENTS WITH CO-OCCURRING HIV, ADDICTION, AND MOOD DISORDERS

Thesis

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By

Angela M. Tatum Fairfax

Creative Arts in Therapy: Dance/Movement Therapy

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ABSTRACT

The purpose of this experimental clinical case study was to investigate dance/movement therapy as an integrated interpersonal form of treatment that would meet the needs of a person with co-occurring diagnoses. To pursue this goal, three subjects diagnosed with co-occurring HIV, addiction, and mood disorders received individual dance/movement therapy twice a week for four weeks during the intervention phase of the study. A search of the literature found that clients with these particular co-occurring disorders generally received either psychiatric care with substance use treatment or medical care. One basis of the treatment outcome provided through dance/movement therapy offered these clients an opportunity to experience integration of cognitive, physical, emotional, and social aspects of being. This treatment modality provided a nonverbal approach to therapy that allowed the client to directly express emotions through the body; hence, stimulating unrestricted verbal expression of painful and frightening emotions.

The eight-week study was a multiple baseline single-case experimental design using the ABA format (i.e. baseline-intervention-baseline phases) with repeated measures. Data was collected and analyzed from 1) pre- and post Health-Related Quality of Life assessment tool Medical Outcomes Study Short Form-36 version 2 Health Survey

(MOS SF-36v2), 2) pre- and post interviews, and 3) researcher field notes of individual dance/movement therapy sessions. The results of the study partially supported the hypothesis that dance/movement therapy impacts quality of life in mental and physical health for the targeted population.

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A good tree can't produce bad fruit, and a bad tree can't produce good fruit. Yes, the way to identify a tree or a person is by the kind of fruit that is produced.

Matthew 7:18,20
Holy Bible, NLT

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CHAPTER 1

INTRODUCTION

The growing trend in mental health is curving towards the multi-diagnosed client who requires a therapist who can provide global treatment. Clients who present with a mental illness, substance abuse problem, and HIV-positive (human immunodeficiency virus) status often encounter treatment that addresses only a part of their needs. The creative arts allow us a place to be ourselves, acting out our worst fears and our highest aspirations (Braheny & Halperin, 1989). The basis of the treatment outcome provided through dance/movement therapy would assist these clients to experience a change in attitude and emotions with increased self-esteem and self-image.

The purpose of this experimental clinical case study was to investigate dance/movement therapy as an integrated interpersonal form of treatment that will meet the complex needs (HIV, addiction, and mood disorders) of a person with multiple Axis I and major Axis III diagnoses (see DSM-IV-TR, APA, 2000). Furthermore, it was anticipated that the study would demonstrate improvement in self-reported quality of life parameters, specifically in mental and physical health, during the treatment phase of the study. The dependent variable is health related quality of life, which was assessed by one of several potential outcome measures (Cunningham, Bozzette, Hays, Kanouse, and Shapiro, 1995; Hadorn & Hays, 1991). Health-related quality of life (HRQOL) is defined

as self-reported client perception of daily living, health, and life satisfaction in terms of symptom tolerance for the purpose of this study. The independent variable was participation in dance/movement therapy sessions. Dance/movement therapy is defined by the American Dance Therapy Association as "the psychotherapeutic use of movement as a process which furthers emotional, cognitive, and physical integration of the individual." This nonverbal approach to therapy allows the client to directly express emotions through the body; hence, stimulating unrestricted verbalization of painful and frightening emotions. Therefore, it was hypothesized that dance/movement therapy would impact quality of life for clients with co-occurring HIV, addiction, and mood disorders as regards to mental and physical health. There is a gap in the literature with regards to dance/movement therapy studies that address quality of life for people who are diagnosed as having a mental illness, substance abuse problem, and HIV-positive status (or, co-occurring disorders).

Because this constellation of health problems is common in community psychiatry populations (Silberstein, Galanter, Marmor, Lifshultz, & Krasinski, 1994) it is a glaring omission in the dance/movement therapy literature. In addition, the complexity of the problems of persons with co-occurring disorders makes it difficult for mental health practitioners and substance abuse counselors (Thomson, 1997) who rely on set models of treatment (i.e. mental health model and disease model of addiction, respectively) to provide effective treatment. Likewise, it becomes difficult for the client to receive adequate care. A goal of this study is to attract attention to the deficiency in comprehensive treatment of co-occurring diagnoses namely dual diagnosis and HIV.

A search of the literature found that clients with these particular co-occurring disorders generally receive either psychiatric care with substance use treatment or medical care. Silberstein, et al. (1994) suggests that there appears to be a lack of treatment of HIV-1 infection on psychiatric units in hospitals. As described in current creative arts therapy literature (Aldridge, 1993; Thomson, 1997; Fisher, 1990), a considerable amount of treatment practices and research related articles in dance/movement therapy and other psychotherapeutic fields tend to address only one or two aspects of this complex diagnosis. For example, dance/movement therapy and dual diagnosis (Thomson, 1997), dance/movement therapy and HIV/AIDS (Hartstein, 1994), dual diagnosis and HIV (Silberstein, et al., 1994), dual diagnosis (Swofford, 2000), or dance/movement therapy and substance abuse (Fisher, 1990) were among the topics that the literature search revealed.

Among the research articles that were found, none suggested a mind-body integrative course of treatment to address all of the client's needs simultaneously. As a result, it may be construed that clients may not be exposed to the resources they require to meet all of their needs. On the contrary, this researcher observed that clients who receive services at Girard Medical Center through the Rehabilitative Creative Arts Therapy Service Department appear to work towards mind-body integration during the course of their treatment. Subsequently, it is proposed that dance/movement therapy has potential for treating clients with co-occurring disorders in that it offers freedom of physical expressiveness and focuses on the total personal experience (Schmais, 1974) regardless of the diagnosis.

Three subjects between the ages of 18 and 60 regardless of gender and ethnicity were recruited for participation. Subjects were recruited from the residential and inpatient units at Girard Medical Center which is located in an urban cultural area of North Philadelphia. Criteria for exclusion from the study included the presence of psychosis, a thought disorder, an AIDS diagnosis, and/or English reading comprehension and written illiteracy. In order to minimize the likelihood of diseases and illnesses that occur in the aging process age parameters were set to include adults between 18 and 60 years of age. As with any case study, the study sample was small and findings are not generalizable to the population from which the sample was drawn.

Due to the complexity of the diagnoses (dual diagnosis HIV+) the study limited mental health diagnoses to mood disorders without psychotic features only. As for the substance abuse aspect, the participants had completed the detoxification process. Likewise, the HIV-positive status was not in the advanced stages of the disease AIDS.

The study was successful in documenting benefits of dance/movement therapy in relation to the hypothesis. Interventions were supplied through dance/movement therapy that can be used by the participant outside of treatment to impact quality of life (e.g. coping skills, recognition of body (self) image, ability to communicate feelings on a mind-body interactional level, etc.). It is anticipated that the study will stimulate future research using controlled group designs and provide information for therapist who may be interested in working with the targeted population. In practice the findings of the study could be used to design programs specific to this population's needs.

Consequently, it may also stimulate discussions among practitioners concerning the use of a mind-body integrated interpersonal approach rather than a singular focus.

CHAPTER 2

REVIEW OF LITERATURE

A review of the recent and relevant past literature that was found will be presented categorically in subsections of health-related quality of life, co-occurring disorders, and HIV-positive status. Literature from the dance/movement therapy specialty is included with information from psychology, psychiatry, nursing, and social work throughout.

Health-related Quality of Life

Health-related quality of life (HRQOL) is defined as self reported client perception of daily living, health, and life satisfaction in terms of symptom tolerance in this study. Hadorn and Hays (1991) understood the need for a brief instrument that both assesses HRQOL states comprehensively and maps empirically derived preferences into these states. The study tested a brief survey, which utilized six aspects of HRQOL, designed to concurrently assess HRQOL and preferences for different HRQOL states. The survey implemented use of a multitrait-multimethod analysis that was used to evaluate construct validity. The results of the survey supported construct validity of self-reported HRQOL.

HRQOL with HIV Patients. A study conducted by Cleary, et al. (1993) revealed that symptoms are the most specific patient-reported measures of health status. The study concurred that assessing HRQOL in persons infected with HIV is extremely important, but most available scales are too long, contain irrelevant items, or do not assess important signs and symptoms of HIV infection. Subsequently, Cleary, et al. (1993) presented a new set of scales to assess symptoms and functioning of persons with HIV infection. The results of that study show that the scales used are reliable and valid measures, but there were several unexpected findings. In 1995 Cunningham, Bozzette, Hays, Kanouse, and Shapiro compared HRQOL in two HIV-infected cohorts: (1) multicenter AIDS Clinical Group Trials in which most subjects are white, privately insured, and high-income and (2) a study of ethnically diverse, low-income patients recruited from public clinics. The research indicated problems generalizing results due to differences in relationships of characteristics with HRQOL trial and nontrial samples. Cunningham, et al. (1995) further reported that HRQOL measures might provide a sensitive means of characterizing those who are included in and excluded from clinical trials. Hadorn and Hays (1991), Cleary, et al. (1993), and Cunningham, et al. (1995) all advised that selection of HRQOL measures should be representative of the target population and consider net impact of all symptoms when evaluating the quality of life in patients with HIV.

Swindells, et al. (1999) aimed to determine whether the quality of life in the patients infected with HIV infection was influenced by satisfaction with social support, coping style, and hopelessness. It was their premise that physical debilitation and psychosocial impact of HIV infection may render these patients susceptible to social

isolation and the resultant lack of support. Furthermore, apart from its nurturing and emotional sustenance functions, social support has been shown to buffer the impact of a wide variety of stressful life experiences, including those related to physical illness (Swindells, et al., 1999). Social support, coping style, and hopelessness (depression) were found to significantly influence the quality of life of HIV-infected patients in the study. Hays, et al. (2000) observed that many studies have reported information about health-related quality of life in patients with HIV disease, but these data have generally been gathered from clinical trials or regional samples and often have few women or ethnic minorities. Their study revealed that scores of the SF-36 Emotional Well-Being Scale was significantly better for all stages of HIV disease than for patients with clinical depression and significantly worse than for the other chronic diseases. In accordance with these findings, Eller (2001) also reported that past studies have shown that the quality of life of patients with HIV was significantly lower than that of patients with other chronic diseases. It was further revealed by Eller (2001) that unemployment, depression, and fatigue were significant predictors of quality of life for patients with HIV and that higher levels of these factors were positively related to lower quality of life. Consequently, the impact of HIV infection on the dimensions of quality of life, including physical and emotional well-being, social support systems, and life roles, has emerged as a key issue for persons infected with HIV (Douaihy & Singh, 2001). Douaihy & Singh (2001) indicated improving overall HRQOL of patients with HIV infection through symptom control and enhancement of positive general health perceptions, therefore, represents an important area of therapeutic intervention. Their study also indicated that

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exercise training (or physical engagement like dance/movement therapy) appears to considerably improve aerobic function and overall quality of life without any impact on immune indices. Social support was positively related to effective coping strategies for patients with HIV and have shown a strong potential to influence HRQOL (Douaihy & Singh, 2001; Tuck, McCain, & Elswick, 2001). Because of the substantial effects that HIV disease has on physical and mental health, the need for supportive and mental health services is likely to be greater in these patients than in patients with other chronic diseases (Hays, et al., 2000). The ultimate goal for treatment is not merely to promote longevity but also to enhance quality of life (Douaihy & Singh, 2001).

HRQOL with Dual Diagnosis Clients. Russo, et al. (1997) analyzed diagnostic and substance abuse group differences on satisfaction and functional indices. Their findings supported that patients with depression (bipolar and unipolar) reported the most dissatisfaction, followed by patients with schizophrenia; and patients diagnosed as manic reported the greatest satisfaction in most life domains. They further reported that satisfaction with various life domains (ranging from patients' living situations to their social networks) is as important as satisfaction with care; that is, it is a result of good care. Daeppen, Krieg, Burnand, and Yersin (1998) found that compared to scores observed in the general population, MOS-SF-36 scores for alcohol-dependent patients were relatively low (indicating worse perception of HRQOL), especially in the psychological and role dimensions, but were closer to populational values in the physical and functional dimensions. These results suggested that alcohol-dependent patients perceived their problems more as psychological than physical and the severity of alcohol

dependence and depression seemed to influence the perception of HRQOL negatively (Daeppen, et al., 1998). Charness (2001) determined whether homeless individuals with dual disorders were more psychiatrically impaired, had poorer quality of life, and displayed fewer psychological assets for treatment. The study revealed that substance abuse was associated with several negative presenting problems including a greater overall level of distress, more symptoms of anxiety/depression, and greater difficulty in delaying the need for gratification.

Zinkernagel, et al. (2001) investigated anxiety, depression, and health-related quality of life (HRQOL) using screening measurements in patients with HIV infection and examined their dependency on biosocial parameters relating to HIV. For participants in the study hospitalization within the last 6 months was associated with higher scores for depression and diminished HRQOL. This demonstrated for the researchers that patients were prone to anxiety and depression, and long-term care must address the social and mental health problems of HIV-infected individuals. Elliott, Russo, and Roy-Byrne (2002) evaluated treatment effect in HIV/AIDS patients with a major depressive disorder. They reported that patients who completed the clinical trial demonstrated a reduction in depression with response to treatment. There was also a significant improvement in HRQOL with the exception of work and financial functioning. They concluded that HRQOL improved in patients regardless of drug or response group and as a function of being in the trial suggested that medications may not have been required to affect HRQOL outcomes and that disease management aspects of care were important. Gaynes, Burns, Tweed, and Erickson (2002) hypothesized that

coexisting depressive illness amplifies the decrement in HRQOL seen in common, chronic medical conditions. The results of this study demonstrated that (1) depression was, in fact, associated with decrements to quality of life, (2) depression can interact with medical conditions to further decrease quality of life, (3) there were possible dangers of conceiving HRQOL as a unidimensional phenomenon, and (4) the very high rates of comorbidity between depression and the chronic medical conditions studied (and the association with decreased quality of life) underscore the need for increased clinical attention to depression by general medical providers for persons with these conditions.

Co-occurring Disorders

For the purpose of this study, dual diagnosis is defined as co-occurring mental health disorder and substance abuse disorder, as described in the DSM-IV-TR (APA, 2000). Swofford (2000) reported that roughly 50% of patients diagnosed with schizophrenia also meet criteria for substance abuse and/or dependence. The Swofford study determined that the relationship between substance use and schizophrenia is significantly impacted by comorbidity; however, further investigation is required for understanding the consequences of this phenomenon. Fisher (1990), Johnson (1990), and Thomson (1997) all observed that the most utilized approach to managing substance abuse is the 12-step program of recovery.

Co-occurring Disorders and Dance/movement Therapy. The literature presented by Fisher (1990) focused on how to support treatment of the chemically dependent in a

28-day inpatient hospital program through the use of dance/movement therapy. Fisher described how patients in a 28-day hospital-based chemical dependence unit presented a variety of physical and psychological symptoms and characteristics. Dance/movement therapy was used to support the commitment to the First Step (Alcoholics Anonymous) by (1) supporting a state of receptiveness, (2) finding a different mode of expression, (3) providing a nurturing environment to allow for reconstruction, (4) using insight to promote honesty, (5) supporting a healthier ego structure through the use of spontaneity, immediate response, and exploring options, and (6) fitting in through self and interactional synchrony (Fisher, 1990). Fisher observed that self-acceptance, receptivity, honesty, and spontaneity as expressed through nonverbal (dance/movement therapy) pathways supported the patient through early phases of recovery.

Johnson (1990) corroborates that Alcoholics Anonymous (AA) is a spiritual approach to recovery, as the creative therapist-shaman is a spiritual healer. Johnson further implies that the false addicted ego-self is associated with defensiveness and attachment while the true Self is associated with creativity and love. Milliken (1990) stated that dance/movement therapy offers substance abusers an opportunity to regain a sense of control and mastery on the most basic level—in the body. Furthermore, the re-achievement of a realistic sense of physical self promotes the individual's ability to tolerate affect and anxiety, which in turn allows for greater spontaneity and freedom of expression (Milliken, 1990). Johnson (1990) proposed that creative arts therapists are in ideal modalities to aid patients in the journey of self-discovery, as the work leads inevitably to some sort of creative product that is the patients' own expression of self

[whether it be a dance or a picture]. Johnson concluded that the role of the creative arts therapist in the treatment of addiction is to call, assist, guide, model, encourage, and inspire creativity and self-expression. The creative arts address the healthy, playful, joyous, curious child living within (Braheny & Halperin, 1989). In addition, movement and art use the arena of play to reinforce and enhance the healing processes and promotes growth. As a result, the nonverbal creative process frees the *spirit* that was trapped in the earlier patterns of development (Braheny & Halperin, 1989).

Thomson (1997) reported that people with psychiatric disorders might become substance abusers in an attempt to relieve their uncomfortable feelings and symptoms, referred to as "self-medicating". Subsequently, the study outlined the fundamentals of "working a program" of recovery to include abstinence, AA/NA meetings, working the (12) steps, sponsorship, and meditation and prayer. Likewise, Thomson outlined a program structure and provided a basis for the implementation of 12-step programs and dance/movement therapy in the treatment of patients with a dual-diagnosis. By actively engaging in the movement, an individual has an opportunity to involve his/her whole being, facilitating a greater self-awareness and mastery over his/her bodily sensations and corresponding emotions (Thomson, 1997). The Chacian method of dance/movement therapy was the basis of the experimental design described in Thomson's study. Marian Chace, a pioneer of dance/movement therapy, utilized a circle formation to facilitate interaction of individuals moving together rhythmically. This method allows individuals to communicate through physical expression and symbolism and promotes identification around an identified issue. For a more in-depth description of Chace's approach the

reader is referred to *Foundations of Dance/Movement Therapy: The Life and Work of Marian Chace* edited by Sandel, Chaiklin, and Lohn, 1993. Work reported by Milliken (1990), Thomson (1997), and Swofford (2000) implies the need for further study in the area of dual diagnosis as it relates to treatment approaches like dance/movement therapy.

HIV-positive Status

Human immunodeficiency virus (HIV) is a retrovirus related to T-cell leukemia virus that affects the immune system and the nervous system (Malone & Osborne, 2000; Kaplan & Sadock, 1998). Silberstein, et al (1994) suggested that poor judgment, disinhibition, and risky behaviors typically associated with both substance use and psychiatric illness may increase the risk of HIV infection. Furthermore, individuals who may also be homeless often have limited access to care, poor insight into their illnesses, and behaviors that put them at risk for contracting or spreading HIV-1 infection (Silberstein, et al., 1994). The study found that nearly one out of four people admitted to an inner city dual diagnosis unit was HIV-1 seropositive. Silberstein, et al. (1994) suggests that in order to control the spread of HIV-1 as well as to address the psychiatric and other medical needs of HIV-1 infected individuals, it is imperative that more be learned about tracking and treating HIV-1 infection in this indigent population with substance abuse and other psychiatric illness.

HIV and Dance/movement Therapy. Hartstein (1994) and Aldridge (1993) make recommendations for setting up treatment programs for HIV-positive patients using

creative arts therapy approach. Hartstein (1994) observed that HIV-positive patients experience a wide variety of emotional response, including depression, anger, anxiety, denial, and disbelief, as a result of being diagnosed. Lee and Gray (2001) wrote "waiting for the results to come in... it's like knowing someone, a loved one, is going to pass away, but when you get that call that it has taken place, sometimes denial and non-acceptance of those words can cause chaotic dilemmas in a person" (p. 18). The goal of Hartstein's pilot study was to implement dance/movement therapy as a means to reduce stress, release tension, increase energy levels (reduce fatigue), and to provide a safe, supportive environment in which to express emotions. The study was based on the premise that through the release of emotional responses within the movement sessions, an HIV-positive individual would be more aware of his/her feelings, thus being able to deal with them more effectively. Finally, through the activation and reintegration of body parts, the body begins to work as a whole unit, not as individual pieces (Hartstein, 1994). Aldridge (1993) suggested that the creative arts therapies have a significant role to play in the treatment of AIDS patients. Coburn (1995) noted that people with AIDS often go through a reevaluation process, laying aside, the roles, behaviors, and masks that no longer seem essential, and open to the spontaneous character of the self unmasked. Specifically, in an effort to maintain integrity and hope, patients who were HIV-positive can explore and express their "being in the world" (p. 288) through dance/movement therapy, which is creative and not limited by their infection (Aldridge, 1993). The literature further stated that not only do creative arts therapies offer an existential form of therapy that accepts patients as they are and affords them an opportunity to define

themselves as they wish to be, they are primarily concerned with aesthetic issues of form and existential notions of potential rather than concepts of pathology. Aldridge (1993) believed that working with a therapist in a creative way to enhance the quality of living could help HIV-positive patients make sense of dying.

Foglietti (1995) and Aldridge (1993) found that feelings such as hope are believed not only to extend life span but do improve and enhance quality of life. Our society often minimizes the need to mourn, both for the terminally ill patient and for his/her family and friends (Coburn, 1995). Aldridge (1993) compared hope to prayer as a coping strategy used by individuals confronted with a chronic illness. It involves an expectation that goes beyond visible facts and can be seen as a motivating force to achieve inner goals (Aldridge, 1993). Lee & Gray (2001) retort that prayer changes outlook, prayer changes despair, and prayer changes hopelessness. The Tuck, McCain, and Elswick (2001) study support the inclusion of spirituality as a variable for consideration when examining the psychosocial factors and the quality of life of persons with HIV disease. Patients reported that spiritual practices provided relief from symptoms and, in some instances, changed the illness outcome (Tuck, McCain, & Elswick, 2001). Fryback and Reinert's study (as cited in Douaihy & Singh, 2001; Tuck, McCain, & Elswick, 2001) found spirituality among HIV-infected individuals was perceived as a bridge between hopelessness and meaningfulness in life. Hopelessness is a symptom of depression which implies that treating the depression may improve HIV status. Indeed, coping by denial may be an expression of helplessness, anger, or depression, and these patients may, in fact, be in need of psychological intervention (Douaihy & Singh, 2001). This has

also been true with treating other medical conditions. Positive affect in the context of chronic stress may also help prevent clinical depression (Folkman & Moskowitz, 2000).

Folkman & Moskowitz (2000) argue that (1) positive affect can co-occur with distress during a given period, (2) positive affect in the context of stress has important adaptational significance of its own, and (3) coping processes that generate and sustain positive affect in the context of chronic stress involve meaning. Their study further suggested that positive affect may also serve as a buffer against adverse physiological consequences of stress associated with HIV infection. Likewise, Billings, Folkman, Acree, and Moskowitz (2000) found emerging evidence to indicate that increasing levels of positive affect are associated with decreasing levels of physical symptoms. They also postulated that association between coping and mood is often examined in the context of a health problem like HIV.

There has been a shift in focus from dying with the illness to living with the illness for people who are HIV-positive which, in turn, catapulted hope for longevity and a cure (Malone & Osborne, 2000). Malone and Osborne (2000) believed that it is this hope for a longer life and possible cure that can be used to motivate substance abusers who are HIV-infected to improve their treatment adherence and quality of life. Their study further indicated that a trusting and mutually respectful clinician-patient relationship, comprehensive treatment regime, and an accepting clinical setting are associated with positive outcomes. Therefore, understanding that patients are at different stages of acceptance and readiness to change is critical (Malone & Osborne, 2000).

HIV and Addiction. Substance abuse complicates both HIV and its management because of the effects that illicit drugs have on various body systems and because of the behavioral disturbances that accompany substance use (Malone & Osborne, 2000). There are probably people with drug addictions who have been HIV-positive for years, but the drug in their system has been holding back any sick feelings, any warning signs their bodies might have been trying to send them (Lee & Gray, 2001). Methadone maintenance is of particular value for individuals infected with HIV with drug problems because most IV drug users are addicted to heroin (Malone & Osborne, 2000). The primary goal of methadone maintenance is abstinence from heroin. Patients infected with HIV may deny having it and refuse to admit it to family members and friends (Malone & Osborne, 2000). Furthermore, these individuals may displace anger about HIV in all directions, directing it at counselors, treatment providers, or their treatment regimen.

From the discussion of the literature, there are few published articles regarding treatment centers that incorporate dance/movement therapy for persons with co-occurring disorders. It is believed that dance/movement therapy as well as other creative arts therapies have something unique to offer in the treatment for this population. The creative integrative processes used in this form of therapy allows the client to access internal structures that directly relate to assessment of quality of life much quicker than other forms of therapy. Furthermore, dance/movement therapy affords an opportunity to maintain control over the body that is constantly growing and changing especially in reaction to HIV and substance abuse. Finally, dance/movement therapy allows for the

exploration through a creative outlet that will support increasing self-esteem and self-image as they relate to physical and mental health.

CHAPTER 3

METHODOLOGY

Dance/movement therapy research is sometimes assumed to be qualitative in nature due to its usual focus on person focused and process oriented human sciences. Historically, dance/movement therapy (DMT) and research have been perceived as incompatible, dichotomous entities—i.e., art versus science (Berrol, 2000). While there have been numerous research studies conducted to examine aspects of dual diagnosis and HIV independently, very few scientific research projects have been published in the field of dance/movement therapy.

Case Study Research Design: The present study employed the single case study design conducted in the ABA format (Aldridge, 1994; Chaiklin, 2000; Kazdin, 1982). The study needed to be sensitive to four major components of the subjects' lives: mental health issues, substance abuse, physical health status, and cultural aspects. The research design was suitable because it is context sensitive, especially in relation to the four components named above. In case study research design, treatment effect can be documented with a small number of subjects (Kazdin, 1982). This design alleviates the potential difficulty of finding enough participants to meet the criteria of a group design study. Aldridge (1994) also determined that problems of recruitment (finding enough willing subjects who satisfy rigorous inclusion criteria) are minimized, the study is

inexpensive, and the results are generally evident. Aldridge (1994) reported that single case research designs have the advantage of being adaptable to the clinical needs of the patient and the particular approach of the therapist. Furthermore, single-case designs highlight individual change in daily clinical practice and allow the practitioner to relate those changes to therapeutic interventions (Aldridge, 1994). A weakness of single case designs is that, although individual change is specific, it is difficult to argue for a general validity of the treatment (Aldridge, 1994). Chaiklin (2000) wrote that the case study's greatest strength is simultaneously considering multiple factors, permitting data collection in a range from gross observations to precise measures.

To establish validity, a case study also uses multiple data collection techniques (triangulation) like observation, comparative analysis, and life history (Chaiklin, 2000). A multiple single case design of dance/movement therapy implemented by Stewart, McMullen, and Rubin (1994) permitted each subject to serve as his or her own control with alternated movement therapy intervention and control condition (no dance/movement therapy) days. This approach allowed a clearer interpretation of the effect of the intervention in question when patients were simultaneously receiving other treatments. As a research tool, the case study method can provide descriptive, exploratory data—both qualitative and quantitative—from multiple sources that are sensitive to the contemporary context within which the experiences take place (Lukoff, Edwards, & Miller, 1998). Aldridge (1994), Stewart, et al (1994), Lukoff, Edwards, and Miller (1998), and Chaiklin (2000) argue that the case study design is a research method capable of providing valuable data and insight into alternative therapies such as

dance/movement therapy. This research approach is also receiving attention as a powerful yet flexible design for clinical research in more established fields such as psychology (Morgan & Morgan, 2001).

The dependent variable was health related quality of life, which was assessed by one of several potential outcome measures (Cunningham, Bozzette, Hays, Kanouse, and Shapiro, 1995; Hadorn and Hays, 1991). Underlying this interest in quality of life is the fundamental question regarding what difference medical treatments *really* make in patients' lives (Lehman, 1999). The independent variable was participation in individual dance/movement therapy sessions. The design directly correlates to the research question: what impact does dance/movement therapy have on the quality of life in clients with co-occurring HIV, addiction, and mood disorders?

Setting: Subjects were recruited from the residential and inpatient units at Girard Medical Center (GMC) which is located in an urban cultural area of North Philadelphia. The residential unit was previously an all male forensic intensive rehabilitation unit where most of the clients were referred through the prison system with drug related charges. However, at the time of the study the objectives of the unit had been re-designed to include the admission of women to this three to six month addiction recovery program. Furthermore, a Methadone Maintenance Treatment (MMT) program was implemented for each client with opioid addiction as the primary criteria for admission. MMT is a medical treatment for opioid addiction. The creative arts therapy services offered on this unit were primarily recreation therapy and leisure education before the researcher/therapist implemented dance/movement therapy groups twice a week. The

design of the inpatient unit consists of an all-male six-month treatment program that addresses the interplay of addiction and psychiatric illness. Most of the clients referred to this program come through the prison system with drug related charges. The creative arts therapy services that are offered on this unit include dance/movement therapy, recreation therapy, and leisure education.

Subjects: The study enlisted three subjects between the ages of 18 and 60. One was an African American female, one was an African American male, and one was a Caucasian male. Criteria for inclusion in the study stipulated the mental health diagnosis to mood disorders without psychotic features only. As for the substance abuse aspect, the participants had completed the detoxification process. Likewise, the HIV-positive status could not be in the advanced stages of the disease. Psychosis, thought disorders, AIDS diagnoses, and reading and written illiteracy constituted criteria for exclusion. Two subjects were recruited from the residential unit and one subject was recruited from the inpatient unit. Although the exclusion criteria stipulated persons with thought disorders, one of the subjects was later revealed as having schizophrenia (chronic residual type). The decision to include this subject was based on the initial nurse referral and review of the clinical chart, which indicated that he was not currently receiving treatment for this disorder. He did not receive anti-psychotic medication at the time and during the initial screening for inclusion it was the clinical impression of the researcher that he was developmentally delayed. Two subjects were receiving methadone maintenance treatment for heroin addiction. Two subjects were receiving mood-stabilizing medication. One subject was receiving HIV-related medication. The duration of HIV-

positive diagnosis spanned thirteen years, ten years, and four years. Each participant received eight sessions of individual treatment.

Subjects were selected and recruited in the following manner. After the study was approved by Institutional Review Committees at GMC and Drexel University, the researcher contacted the directors of the designated residential and inpatient units to propose the research objectives and to gain support and permission to conduct the research study on the unit. Once that approval and support was procured the researcher met with the nurses and social workers to review the criteria for inclusion in the study, and request referrals for the most qualified clients. In the event that a selected subject could not or elected not to participate before the midpoint phase another referral would be obtained. Once each subject had engaged in the study to at least the midpoint phase the entries in the sealed container were shred immediately.

The researcher scheduled a date and time to introduce herself to the subjects individually and offer a brief generic description of the research study. In this meeting the researcher then asked the subject to read the consent form aloud pausing after each paragraph or section (see Appendix A). Each subject was prompted to provide an explanation of each paragraph or section in the subject's own words. Upon request, the researcher explained items that were not understood by the subject.

Instrumentation. Quality of life assessments attempt to provide a broad overview of treatment outcomes from the patient's perspective (Lehman, 1999). The MOS SF-36 was designed for use in clinical practice and research, health policy evaluations, and general population surveys (Ware & Sherbourne, 1992). The questionnaire comprises 36

items selected so that it could be completed in under 10 minutes while retaining the validity and reliability of the longer parent questionnaire (a battery of 149 health status questions) (Ryan & White, 1996). Ryan and White (1996) reported that the results from the MOS SF-36 supported their hypothesis. In addition they reported that based on its sensitivity to the health problems of heroin users, the MOS SF-36 may be a very useful tool for overall health evaluation and to chart the changes that occur during treatment. The MOS SF-36v2 includes one multi-item scale that assesses eight health concepts: 1) limitations in physical activities because of health problems; 2) limitations in social activities because of physical or emotional problems; 3) limitations in usual role activities because of physical health problems; 4) bodily pain; 5) general mental health (psychological distress and well-being); 6) limitations in usual role activities because of emotional problems; 7) vitality (energy and fatigue); and 8) general health perceptions. These subscale scores further yield two main cluster scores comprising a physical comprehensive score and a mental comprehensive score. Ware and Sherbourne (1992) suggested that scoring standardized responses to standardized questions is an efficient way to measure health status. Their goal for SF-36 was to enhance content validity and construct scales that were likely to more precisely detect medically and socially relevant differences in health status and changes in health over time. The MOS SF-36v2 has strong internal consistency reliability as outlined by Ware, Kosinski, and Dewey (2000). The MOS SF-36v2 implements norm-based scoring to interpret scores and compare scores across surveys. It is based on a mean of 50 with a standard deviation of 10 in relation to norms depicted in the 1998 general United States population. In which case,

higher scores represent better quality of life. In a study conducted by Ryan and White (1996) results from the MOS SF-36 showed that the population of heroin users at entry to methadone maintenance treatment were in very poor physical and psychological health. Likewise, Daeppen (1998) found that alcohol-dependent patients' profile of health-related quality of life was similar to that of patients with depression.

Procedure. Three subjects were recruited each to participate in a separate eight-week case study protocol. The design followed the ABA format of 1st baseline (two weeks)-intervention(four weeks)-2nd baseline (two weeks). Subjects were interviewed four times throughout the study by the same GMC staff person. The first interview was conducted at the beginning of the 1st baseline phase. During the 1st baseline phase subjects continued to receive standard GMC care and were asked to complete a Health-related Quality of Life assessment tool. The assessment tool utilized in the study was the Medical Outcomes Study Short Form-36 version 2 (MOS SF-36v2) Health Survey. The second interview and survey was completed prior to the intervention phase.

Intervention. During the next four weeks (intervention phase) subjects received eight fifty-minute sessions of individual dance/movement therapy treatment in a designated confidential therapy room. The student researcher provided the dance/movement therapy and subjects continued to receive the standard GMC care. Each dance/movement therapy session consisted of four stages including warm-up, theme development, cool down, and closure. The warm-up phase consisted of activities such as breathing, stretching, and mirroring to establish rapport and interactional synchrony.

Theme development activities allowed the subject to explore movement range and quality within the context of topics provided by the researcher. Topics included (1) rapport and trust building; (2) exploration of emotions on a body level; (3) labeling and embodiment of emotions associated with HIV diagnosis; (4) perception of current quality of life; (5) coping strategies and relaxation; (6) instillation of hope; (7) sense of self; and (8) closure. The cool down phase facilitated physical and emotional awareness to the self and to the researcher. Closure allowed specific time for verbal processing and acknowledgement of occurrences during the session. Subjects were allotted two excused absences from the intervention phase to continue participation in the study. More than two absences was cause for partial exclusion of data in the analysis phase.

The third interview and survey was conducted at the end of the dance/movement therapy intervention and prior to the 2nd baseline phase. The final two weeks concluded with a second baseline phase. No intervention was provided; however, subjects continued to receive standard GMC care during this phase. The fourth interview and survey was conducted at the close of the 2nd baseline phase.

Table 1 Case study design.

Interview SF-36*		Interview SF-36 Field Notes	Field Notes	Field Notes	Interview SF-36 Field Notes		Interview SF-36
Week 1	Week 2	Week 3 D/MT*	Week 4 D/MT	Week 5 D/MT	Week 6 D/MT	Week 7	Week 8

*MOS SF-36v2 Health Survey; *D/MT=Dance/Movement Therapy (2 sessions per week)

Data Collection: Data were collected from three sources as follows:

1) MOS SF-36v2 health surveys were completed by subjects four times, and always prior to completion of each interview (see below). A GMC staff person administered the MOS SF-36v2 and was available to provide assistance and assure comprehension of the questions. The staff person was aware of the purposes of the study.

2) Narrative data were collected by a GMC staff person through four interviews during identified measurement points. Each interview was based on five pre-determined questions that were constructed by the researcher (see Appendix B). The interviewer was free to repeat or rephrase questions as needed to encourage a full response and assure subjects' comprehension of the questions. Interviews were audio taped.

3) During the intervention phase the researcher maintained a journal of field notes that was completed in a timely manner after each dance/movement therapy session (see Appendix G).

All data collected for the purpose of this study were kept confidential in a secure location by the researcher.

Data Analysis: Data were analyzed as follows:

1) MOS SF-36v2 forms were scored by the researcher following instructions provided in *How to Score Version 2 of SF-36® Health Survey* (QualityMetric, Inc., 2000). Changes across time on HRQOL assessments (MOS SF-36v2) were displayed in graphs and other simple visual representations.

2) Interview responses were transcribed by the researcher from the audio taped recordings.

3) Narrative data from the researcher's field notes were transcribed and analyzed using qualitative data analysis techniques.

CHAPTER 4

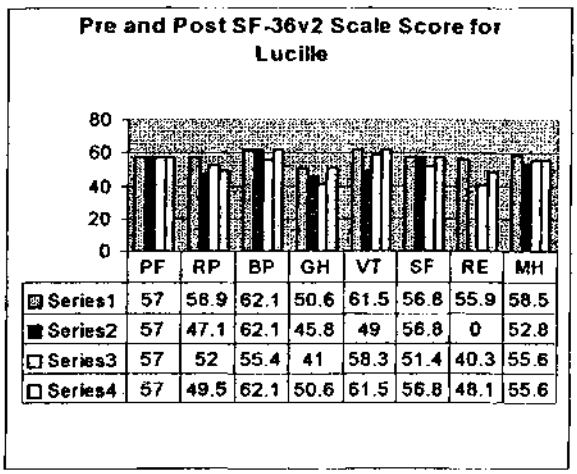
RESULTS

This chapter presents both quantitative and qualitative data for each subject, in that order. For each subject, a graph shows the scores for the health related quality of life assessment tool Medical Outcomes Study Short Form-36 version 2 (MOS SF-36v2). Two series of scores were collected prior to the dance/movement therapy intervention and two series of scores were collected afterwards. For purposes of this study, discussion of results will reflect the following scale scores: 1) role limitations due to physical health, 2) bodily pain, 3) vitality, and 4) role limitations due to emotional problems. Kazdin (1982) wrote that if the level of behavior changes as treatment is implemented or withdrawn, it is suggested that treatment is responsible for the change. Responses to interview questions were transcribed from audio tape recordings for pre and post intervention phases. In addition, clinical field notes from each 50-minute individual dance/movement therapy session are included with descriptions of interventions, process in treatment sessions, observations, clinical impressions, and inferences by the therapist researcher. Names have been changed to protect the confidentiality of the subjects.

Subject #1 Lucille

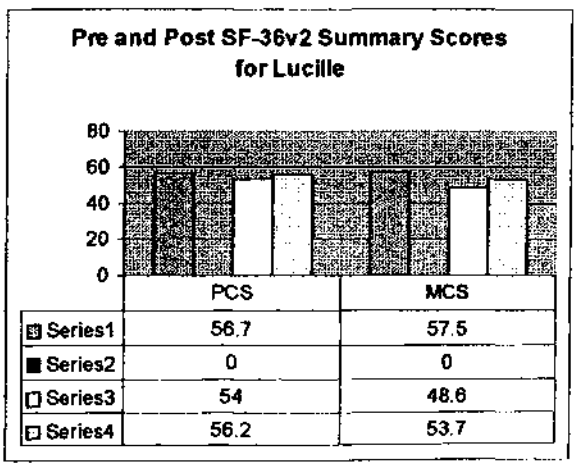
The results of the MOS SF-36v2 (Figure 1) indicate that Lucille's perception of her quality of life is within average range compared to the general US population. Scores for role limitations due to physical health (RP) during the 1st baseline were inconsistent but within the standard deviation range. During the 2nd baseline these scores were more closely related. Bodily pain (BP) scores were consistent during the 1st baseline indicating that she experienced pain less than 62.1 percent of the general US population. There was a negative shift in the level of pain experienced in the 2nd baseline with a return to Lucille's norm. There was a significant difference in vitality scores (VT) in the 1st baseline phase which may be indicative of unrelated events that may have occurred prior to completing the survey. These scores increased in the 2nd baseline phase. It is important to note that answers from the second administration of the MOS SF-36v2 did not yield a score for the subscale role limitations due to emotional problems (RE). Her scores were lower than the general US population norm for this subscale for the 2nd baseline phase. The subscale scores role limitation due to physical health (RP), bodily pain (BP), vitality (VT), and mental health (MH) display significant data as they each indicate improvement between series 2 and series 3 where the dance/movement therapy intervention occurred. According to Kazdin (1982), it can be inferred that this increase in quality of life was due to the intervention. In addition Lucille's overall physical health and mental health summary scores (Figure 2) were void for the second administration of the survey. The authors and distributors of the survey do not provide information to

explain this phenomenon. There was a slight variation in physical functioning (PCS) and mental functioning (MCS) during the 2nd baseline phase of the study.



	PF	RP	BP	GH	VT	SF	RE	MH
Series1	57	58.9	62.1	50.6	61.5	56.8	55.9	58.5
Series2	57	47.1	62.1	45.8	49	56.8	0	52.8
Series3	57	52	55.4	41	58.3	51.4	40.3	55.6
Series4	57	49.5	62.1	50.6	61.5	56.8	48.1	55.6

Figure 1. Legend: PF=physical functioning, RP=role-physical, BP=bodily pain, GH=general health, VT=vitality, SF=social functioning, RE=role-emotional, MH=mental health



	PCS	MCS
Series1	56.7	57.5
Series2	0	0
Series3	54	48.6
Series4	56.2	53.7

Figure 2. Legend: PCS=physical health score; MCS=mental health score

The responses to the four interviews that were conducted after completion of the MOS SF-36v2 are recorded in Appendix C. During the first interview Lucille responded to the questions with a selfless focus. Many of her responses were in reference to helping the researcher do well or reflecting on her dance/movement therapy group experiences. In the second interview, she described dance/movement therapy as an enjoyable relaxing form of therapy. She was able to distinguish between dance/movement therapy and verbal therapy as "different sides of the spectrum" in relation to open expression. The third interview occurred after the dance/movement therapy intervention phase and Lucille spoke in length about enjoying the relationship created with the therapist researcher and the process in both individual sessions and group sessions. In addition she reported that dance/movement therapy was a way to "put your feelings into motion". By the fourth interview Lucille's responses were reflective of those in the second interview. She had difficulty keeping the focus on herself but related her answers to external factors.

The following are field notes taken by the researcher. Language from Laban Movement Analysis and the Kestenberg Movement Profile are used throughout for description of movement. The reader should refer to the movement glossary Appendix F for definitions of these terms.

Description of Subject. Lucille is a medium build 43-year-old African American woman who wears glasses. She has a primary diagnosis of Opiate Abuse and Cocaine Abuse with a history of Depression. Her cocaine use began at age twenty-three and her heroin use began at age thirty-seven. Lucille has been diagnosed with HIV and Hepatitis C since 2000. She currently does not receive any HIV related medication. She does

receive Methadone Maintenance Treatment (MMT) which is a medical treatment for opioid addiction. She has full use of Efforts with preferences for fighting Effort qualities (Bound, Direct, Strong, Quick). A majority of her movement patterns displayed Bound, Direct, and Strong sequences. She used minimal isolative amounts of space preferring to sit in a chair in the corner while maintaining a guarded erect upper body (known as body armor).

- Session 1

Lucille presented with low energy. Upon entering the room she looked around as if inspecting the area then decided to sit in a wicker chair in the corner. She maintained fleeting eye contact with her chest in a held upright position. She reported having a cold and feeling congested. Her breathing was shallow. I observed that her movements were in near and mid reach space while being Sustained with enclosing gestural hand movement. She used widening hand gestures when discussing issues that she was passionate about (i.e. family members). She stated "I think about my HIV more now because I'm sick and the first antibiotics I took didn't work. So, I need to get something stronger". There was some discussion of her history of substance abuse and HIV status. When discussing her HIV status, she stated "I feel embarrassed and ashamed about that" and "it's difficult to discuss with my family and friends". She further commented "I don't take HIV medication and I don't want to until it's necessary".

She inquired about my interest in conducting the study and appeared to be satisfied with the reply. She shifted her weight forward and back at the torso while keeping her feet stable and grounded. She talked a lot about helping others during her life (i.e. daughter, mother, brother, grandson). She held a pillow on her lap blocking her torso with her knees held together.

She maintained a positive self-image although it seemed that she had an emotional detachment from her medical illness. Likewise, she had a preference for externalizing issues that were potentially overwhelming. The session ended with us mirroring stretching and breathing movements.

- Session 2

Lucille initiated and led the warm-up with stretching while standing in the center of the room. She used mid and far reach space with extension into the horizontal plane. She stated that she felt better with the new antibiotics. Her use of breath was steady and deeper with intention. She stood sideways in front of me, stating "I don't want you to get my germs".

We used 'feeling' flashcards to explore emotions and feelings on a body level. She selected flashcards in three categories 1) those she identified most with, 2) those that were opposite, and 3) those reflecting how she felt today. After she selected flashcards, she told a movement story for each category. She said, "this is helpful; I haven't thought about a lot of these feelings". I noticed that she moved with a one-piece trunk and isolated her body parts while using her pelvis as the central point. She selected strong defensive words and appeared carefully guarded emotionally when interpreting her movement stories. She seemed to struggle in deciding to select the word 'sensitive' and commented "I'm sensitive but don't tell nobody 'cause I like to keep that hidden".

When describing her most hurtful experience, she became tearful and filled with emotion. Her affect changed and her chest hollowed slightly as she reflected, "when my mother passed". When asked to describe her most natural high, she replied "I haven't reached that point yet".

She had an external focus with pseudo optimism. Her movements fluctuated between fluidity and binding. She maintained a held erect torso that appeared to be defensive. The session ended with calming and deepening breaths.

- Session 3

Lucille walked straight to the wicker chair in the corner. She was pre-occupied by a situation that occurred over the weekend and proceeded to explain what happened. Her upper body was Bound with growing and shrinking controlled breathing. Her lower body was in constant motion, which had an Indirect, bouncy, anxious quality.

When asked to label and embody her emotional reaction to the HIV diagnosis, she replied "I just accepted it, that's all I can do is deal with it". She was guarded withholding an emotional response and displayed an indifferent sullen affect. She used conversational hand gestures of widening and enclosing when making a point. She was aware of when and how she contracted the virus and maintained "I wasn't angry or upset because I knew the consequences" and "I just have to take better care of myself because along with HIV came Hepatitis C". She was hopeful about the future and expressed a desire to get married some day.

When I made reference to how she held her chest like a shield, she replied "I never noticed, it's been like that for a long time".

- Session 4

Lucille did not attend the session because she was presenting a lecture.

- Session 5

Lucille entered the room and took a package of strawberries from her pocket. She began to eat a few and offered some to me as I set up the radio. She surveyed the room and inquired "what happened to my chair, it's broken" referring to the wicker chair. She decided to sit in another chair against the wall. She announced that she had been referred to the Job Readiness Center to take some preparatory classes. She further stated that the classes were conducted daily and she would receive help formulating a resume and

setting up interviews. In turn, she began to discuss her plans for the future to work with children in recovery, to buy another house, and to get married.

When I inquired about her coping strategies, she replied "I'll just plan to stay around other recovering addicts". Her body attitude seemed narcissistic with a presentational posture held in the vertical plane. She worked hard to control her internal and external impulses by controlling her temperament and speech. She used a combination of tension flow (even flow) and shape flow (narrowing). She seemed determined to maintain focus on recovery with unrealistic expectations for the potential of relapse.

- Session 6

Upon entering the room Lucille began to straighten up by arranging the chairs against the wall. (We were in a different room) She proceeded to sit in a chair that was wedged between the table and a corner chair. She propped her feet up on her chair frame and began to talk about the Job Readiness Center. Her posture was uncharacteristic of those in previous sessions as she slouched in the chair with shortening and sinking in the torso. However, her chest and shoulders were held and erect. Her presentation was Bound, Direct, and Strong with shallow breathing. She seemed excited as she talked about plans to enroll in the HIV peer counselor classes to "learn more about my disease". She further expressed an interest in social work in the juvenile justice system by stating "I figured I'd put my degree to work". "Besides, I have a lot to offer because I know where they're coming from. I'm from the ghetto, I've done drugs, go-go dancing, the whole nine yards".

She proceeded to discuss hope for the future "I will own property again; I'm educated; my family is taken care of so I can focus on me". She stated that she bought her first house when she was in her 20's while in college and raising her daughter but it was taken away in a drug-related seizure. She also idealized "I want a husband some day; I'm still young; I can work with kids for twenty years and retire at 64".

Her upper body was distantly pressed against the wall and she sat with her knees protruding which created a barrier between us. Verbally she was optimistic and self-assured. Nonverbally she was emotionally shallow. In any event she maintained a sense of resilience and determination.

- Session 7

Lucille looked around the room then sat in a chair in the corner. When questioned about her limited use of space, she replied "my other chair is broken" referring to the wicker chair. I invited her to explore other areas of the room and to use more space. While discussing how she felt about herself, she stated "I've changed, I used to be loud and rowdy but I'm calmer now".

I suggested creating a poem that speaks to her sense of self that could also be displayed in a dance. She had a difficult time getting started and could not easily name two characteristics to define herself. Her breath became short, quick, and unregulated. However, once she was able to be open-minded and honest about how she felt she was able to complete the poem fairly quickly. I observed that she was goal-oriented and

focused combining fighting Efforts (Bound, Direct, and Strong) with a shape flow quality of narrowing.

Overall, she was very proud of her accomplishment and repeated "I'm a poet and I know it!" several times while laughing and showing me her poem. "Look, you made me into a poet!" She appeared more relaxed with a brighter affect. She was able to tolerate me pushing her to search internally for a deeper level of self-awareness without intellectualizing or projecting. As a result, she was able to admit to feelings of fear and concern about her life and her future. There was no time left to create her dance so she suggested that she work on it for the next session.

- Session 8

Lucille came in with a bright and cheerful affect. She began reviewing the CD's and inquired "what are we going to do today?" We reviewed her poem and discussed its meaning. She openly displayed what appeared to be sadness to her words and inquired about the symptoms of mood disorders. I presented her with a thank you card and a souvenir box that she could decorate as she like. She said that she would decorate it some other time and selected colorful paper for the task.

She decided that she wanted to share her poetic dance and began moving in a circular motion in the center of the room. I noticed that she was willing to use more space although she limited herself to half of the room. She danced her poem without the words to mellow music about empowerment. Lucille entitled the poem 'I Am Curious' and read it aloud: *I am confused and I am curious; I wonder where I will go from here; I hear the music from the CD; I see pretty lights; I want to be happy and successful in this life; I am confused and I am curious; I pretend to understand; I feel confused; I touch emotions; I worry if I'll make it; I cry when I think of the past; I am confused and I am curious; I understand that God is good; I say amen; I dream about happiness; I try to do the right thing; I hope I will make it; I am confused and I am curious.* Her body attitude was that of mobility and elasticity. She used more indulging Efforts (Lightness and Sustainment with low intensity bulging and hollowing) than I had seen in prior sessions. However, I still observed an element of Directness like a fear of losing control. She repeated the dance a second time while I read the words and the third time I mirrored her. The dance had a bouncy swaying quality with occasional twirling. Although we danced in synchrony, she did not make eye contact with me and seemed to have an internal focus. She smiled proudly stating "I'm a poet and choreographer, how about that".

We reviewed the concepts of the previous sessions. She said, "I'm glad I did this; some days I didn't feel like it though". I asked her what she got out of the sessions. She said that she got a lot out of it "I guess we helped each other". She further stated that "this is the first time in a long time I was happy and sober on my birthday". We used the remainder of the time to mirror each other in a goodbye dance and she expressed her gratitude for the experience and relationship we shared.

Lucille displayed movement patterns that were consistent in all of the dance/movement therapy sessions. She presented a body attitude that was held and

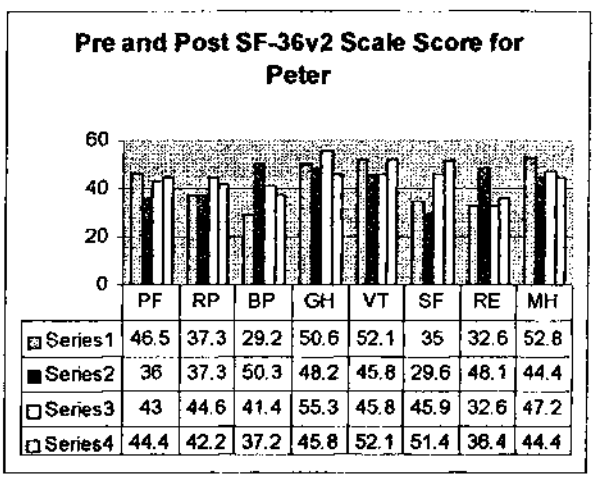
Bound in the chest and shoulders and her use of breath was shallow. There was no shaping nor was there sense of attunement between Lucille and the therapist. There was limited opportunity for sharing of space as she remained seated for many of the sessions.

While initially Lucille saw herself in a helping capacity in terms of participating in the study, after the intervention phase she was able to recognize benefits for herself. Her scores on the MOS SF-36v2 were consistent with how she viewed her current quality of life and as reflected in the interviews and spontaneous statements during the intervention. The most important outcome for all measures was her determination to be emotionally detached and guarded. As she stated, she has been like that for a long time but there were times of authenticity and deepening on a body level.

Subject #2 Peter

The results of the MOS SF-36v2 (Figure 3) indicate that Peter's scores are lower than the norm reported in the general US population. It is important to note that the third time Peter answered the survey, one of the questions was skipped. The scores for the subscale role limitations due to physical health (RP) are significantly lower during the 1st baseline phase. However, there was an increase in these measures during the 2nd baseline phase. During the 1st baseline bodily pain (BP) scores were disproportionately construed. These scores were borderline with the general US population norm at the 2nd baseline measurement point. Vitality (VT) scores were interesting in the 1st and 2nd baseline as they are inverted displaying peaks-valleys-peaks. Peter showed improvement in 5 out of 8 subscales after the dance/movement therapy intervention (between series 2 and series 3)

which is in accordance with Kazdin's (1982) suggestion. These scores indicate increased quality of life in physical functioning (PF), role limitation due to physical health (RP), general health (GH), social functioning (SF), and mental health (MH). Peter scored fairly lower than the general US population overall on the role limitation due to emotional problem subscale (RE). During the 1st and 2nd baseline Peter's summary scores were below the US population norm but within the standard deviation for physical health (PCS) and mental health (MCS) (figure 4).



	PF	RP	BP	GH	VT	SF	RE	MH
Series1	46.5	37.3	29.2	50.6	52.1	35	32.6	52.8
Series2	36	37.3	50.3	48.2	45.8	29.6	48.1	44.4
Series3	43	44.6	41.4	55.3	45.8	45.9	32.6	47.2
Series4	44.4	42.2	37.2	45.8	52.1	51.4	36.4	44.4

Figure 3. Legend: PF=physical functioning, RP=role-physical, BP=bodily pain, GH=general health, VT=vitality, SF=social functioning, RE=role-emotional, MH=mental health

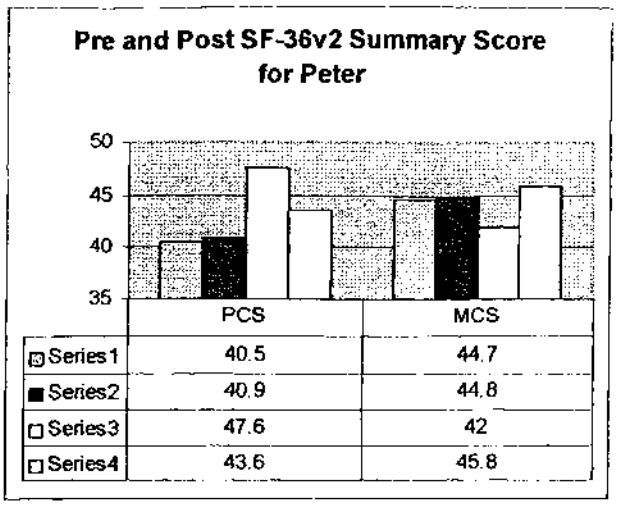


Figure 4. Legend: PCS=physical health score; MCS=mental health score

The responses to the four interviews that were conducted after completion of the MOS SF-36v2 are recorded in Appendix D. Peter's responses in the first interview were indicative of his level of comfort with his HIV diagnoses and how his role in the study could be beneficial to others. He had a clear understanding of the differences between dance/movement therapy and other forms of therapy. He stated, "In talk therapy sometimes you're looking for the right answer but you don't have to worry about the right movement or the right thing to say or anything". During the second interview he seemed to focus on his experience with dance/movement therapy stating "dance therapy is a class where I just unwind". He also seemed concerned with how to explain his medical status to a potential companion. Peter displayed insight and self-awareness in the third interview. He was able to verbalize and label his feelings in an appropriate and meaningful manner. He explained, "I feel as though I'm not putting on a façade anymore I'm being who I really am". In the fourth interview he offered support and appreciation

for the research study. He focused more on the physical aspects of dance/movement therapy and how it effected his physical abilities. Overall, he was appreciative of being able to assist others and of being treated like a person.

The following are field notes taken by the researcher. Language from Laban Movement Analysis and the Kestenberg Movement Profile are used throughout for description of movement. The reader should refer to the movement glossary Appendix G for definitions of these terms.

Description of Subject. Peter is a slim build 48-year-old African American male who wears reading glasses. He has a primary diagnosis of Heroin Dependence and Cocaine Dependence. His heroin use began at age seventeen and his cocaine use began at age forty-five. He also has a diagnosis of Depression. In 1993 he contracted HIV and Hepatitis C. He currently receives two HIV related medications, an anti-depressant, and MMT. He has full use of Efforts with preferences for indulgent Effort qualities (Free flow, Indirectness, Lightness, Sustainment). He uses a lot of twisting his upper and lower body as if making a boundary around himself.

- Session 1

Peter seemed to be pre-occupied and stated such due to an incident that occurred on the weekend. He stood in the center of the room swinging his arms and twisting his upper body freely. I mirrored his movements and we maintained a consistent rhythm. He used far and mid reach space with indulging Efforts of Free flow, Indirectness, and Lightness.

He openly discussed his HIV status, substance abuse history, and depression. He was insightful about his health as he shared "I think more about my HIV because I'm having symptoms now that were probably masked by the drugs". He solemnly stated, "I'm tired of getting high. It's a job – hustling, stealing, and waiting". He went on to say "I don't mind talking about my HIV but it's hard to tell women. I don't want to die alone but nobody's gonna want me". His use of breath was deep and controlled but held at times.

Peter expressed his desire to spend more time with is family, to get a job as an HIV counselor, and to have a home of his own. "I don't need nothing fancy just a small apartment with my name on the lease; I've never had that before and that's important to me." He sat sideways in a chair and continued to discuss his substance abuse history. He seemed comforted that his mother and daughter were part of his support system. He maintained a held upper torso with widening arc like movements of his arms and shoulders. He also sustained direct eye contact and addressed me by name in conversation. We ended the session with stretching and breathing exercises.

- Session 2

Upon entering the room, Peter stated that he felt relieved about the treatment team meeting regarding the incident from the weekend. "I was surprised about how positive it was." We had a brief warm-up with stretching and mirroring each other's movements. Afterwards I explained the task and theme of the session to explore feelings on a body level and he began selecting 'feeling' flashcards three at a time.

He created movement stories for feelings that he identified with, feelings that were opposite, and feelings depicting how he felt today. He arranged each set of flashcards in a specific order and I recited them as he danced. His movements were creative, specific, and well thought out. In addition his affect was appropriate to the feeling that he portrayed. He was able to make connections between his 'addicted self' feelings versus his 'non-addicted self' feelings. He said "it was hard to select the cards but it was easy to act them because I identified with all of them". When I asked him to describe his most hurtful experience, he replied "breaking up with my girlfriend". He described his most natural high as "waking up everyday clean".

He continued to use mid and far reach space but he used more of the space in the room. At times we shared space which usually occurred during conversation as he stepped towards me. He maintained constant movement for the duration of the session utilizing Effort combinations of Free flow, Indirectness, and Sustainment.

- Session 3

Peter initiated the warm-up with stretching and breathing. His movements were stiff and fragmented so I suggested that he use his breath to direct his movement. He began to use more space and I noticed that there were clear boundaries at the waist with isolation of body parts.

I asked him to label and embody the emotions he felt when learning of his HIV status. He replied, "I was surprised about the HIV but I knew I was doing risky behaviors with sex and drugs". He appeared concerned when discussing his HIV and diverted his eye contact. He explained, "I found out in 1993 when I was in treatment but they couldn't tell me how long I had it before that". "I take my medication every day but every little symptom like thrush and diarrhea makes me think 'is this it?'". He maintained constant movement with weight shifts from side to side. His movement had a bouncy quality as he swung his arms freely twisting his upper body. Peter reported having a thirty-year drug use problem. He was able to embody the effects of his drug use, his reaction to his HIV status, and his goals for the future into a collaborative dance.

"I was running around all the time chasing drugs and women but now I'm calm and laid back" was his story to accompany his dance.

It appeared that he had insight into his illness and how it affected his body and his life. He paused and stated "I just want a place to call my own and a nice woman who cares for me, that means a lot to me, and to get back into my family's lives". At the end of the session, relaxing music was played and we returned to stretching and breathing techniques.

- Session 4

Peter assisted with the set up of the radio. He appeared to be in pleasant mood. He selected the music and initiated the warm-up with breathing and stretching. He reported his achievement of attaining Level III unit privilege status after his presentation this morning on the unit. He stated that he spoke about guilt and shame concerning his relationship with his daughter and her mental limitations. He expressed concern about controlling his emotions during his presentation as he stated "I wanted to cry but I couldn't". He reflected, "I feel real bad about how I acted when she was coming up." He kept his hands in his pockets while stepping side to side with intermittent up and down rhythmic knee bends.

Peter was able to give a history of how his quality of life changed over time stating "I was a gang runner but now I'm more mellow". He further reflected, "I feel good but I'm a little worried about this HIV because I'm having symptoms now". Peter looked towards the floor and said "I think about going back to using 'cause then I won't feel it but I know that's not the answer". He maintained small to mid size movement while expressing concerns, relationships, and HIV symptoms. "I don't know how the disease progresses but I know you die from some other disease you can't fight off."

His breath was held in his chest and shoulders and he moved with a one-piece trunk. When I brought this to his attention, he replied "I wasn't aware of that. I hold tension in my head, I get quiet, and I isolate to think". He advanced toward me and whispered "I haven't talked about these feelings with anybody but I think about them sometimes" referring to how his substance abuse impacted his relationships with his daughter and his mother. This was the first time that I noticed Bound flow with advancing forward and backward in a rocking motion in his movements.

- Session 5

Peter complained of feeling "tired". He sat in a chair against the wall and we talked about coping strategies. He stated, "I'll get a [Narcotics Anonymous] home group, a sponsor, and a place of my own". He confirmed "I know within my heart that I don't want to get high no more".

I put on soothing music and we continued with stretching while seated. The focus was directed to breathing and relaxation. He fell asleep briefly then re-focused to the relaxation techniques. His body position was grounded and relaxed with snapshot gestures pausing midstream. He appeared drowsy as his eyes closed slowly when blinking and his speech was fragmented. I did not notice use of any particular Efforts other than Sustainment and passive Weight. Peter was hopeful about the future. He

reported that he was referred to the Job Readiness Center to take vocational and preparatory classes. He expressed interest in obtaining a part-time job to start out and then build up to full-time hours.

- Session 6

  Peter missed this session due to complaints of physical pain.

- Session 7

Peter stood in the center of the room and we completed a light warm-up of stretching. His breathing was deep and intentional. He appeared depressed evidenced by his concave chest and averted eye gaze. He displayed more elasticity and mobility in his waist, which he controlled with his breathing.

He sat down and began to discuss his current health status stating "I have been worried about my health more". He reported that he was having chest pains last week but the doctor confirmed that there was nothing to worry about. I asked him how he views himself and invited him to create a poem reflecting his sense of self. He took his time to think about things that seemed important to him. He paused and said "I've never done anything like this before" as he continued to write down his thoughts and feelings regarding past relationships.

His combination of Efforts included Bound flow, Directness, and Sustainment. He was goal-oriented and grounded. I asked if he wanted to create a dance for his poem but he did not. I asked him to give it a title and he definitively stated 'peace of mind'. We looked at the poem and I read it aloud: *I have good feelings towards everyone that's doing something positive; I really think I have gathered the right things this time to stay clean; I hear a sound of joy in my life; Which I think is children playing with no cares I the world; I see myself climbing this mountain and this time I reached the top; I want to have peace of mind; Meaning being able to handle whatever comes along, without using; I am at peace with myself; And I care about what happens to me; I pretend me and my grandchildren are the only people in the world; And we could do whatever we want; I wonder is life for me going to be happy and fulfilling and prosperous; I hear chimes of happiness; I worry about getting clean and not lasting a year; My HIV doesn't let me survive; I cry about not having a woman in my life; I hope for peace and acceptance.*

- Session 8

Peter entered the room inquiring "what are we going to do today?" as he sat at the table. We discussed closure and reviewed the themes of the previous sessions. I presented him with a thank you card and a souvenir box to decorate as he liked. He decided that he wanted to decorate his souvenir box while we talked. He reported "I read my poem again and I can't believe I wrote that. I knew I was sensitive but never expressed it before." He went on to explain "when I grew up it wasn't cool to be sensitive, girls only liked tough gang type guys but that's not really me". While reflecting on the previous sessions, Peter looked at me and said "I'm really glad I did this; I feel an awakening; things I've never told anybody I was able to say here". He

spoke about loss, family relationships, and wanting companionship even if it was superficial. In closing he stated, "I just want peace of mind".

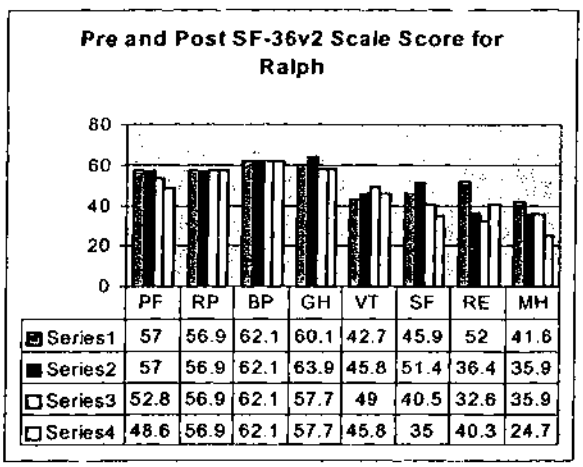
Peter maintained a shared focus in movement with the therapist. He displayed movement patterns that were inclusive of the therapist's kinesphere in near reach, mid reach, and far reach space. His body attitude was fluid with appropriate affect and interaction. There was a sense of interactional synchrony and engagement with the therapist in his use of Tension Flow attributes of low intensity Flow Adjustment.

Overall scores for quality of life measurement MOS SF-36v2 were marginal to low in comparison to the general US population norm. His scores were reflective of how he viewed his quality of life between baseline phases. Peter was humble and insightful into his mental and physical condition, which was consistent throughout the interviews and the intervention phase. He was self-reliant and creative during the dance/movement therapy sessions, which seemed to have helped him put some important life events into perspective.

Subject #3 Ralph

The results of the MOS SF-36v2 (Figure 5) indicate that Ralph's perceived quality of life is above the general US population norm on 4 out of 8 subscales. His scores were consistent across four administrations of the survey in both the 1st and 2nd baseline phases for the role limitations due to physical health subscale (RP) and the bodily pain subscale (BP). The vitality subscale (VT) displays an increase between the 2nd and 3rd scale scores prior to and immediately following the intervention phase

indicating improved quality of life. There was a significant decline in score on the role limitations due to emotional problems subscale (RE) in the 1st baseline. During the 2nd baseline this scale score further declined post intervention but indicated improvement on the final administration of the survey. Overall Ralph's summary scores were above the standard deviation in physical health and significantly below the standard deviation in mental health in comparison to the general US population norm. This may indicate thought disorder, drug induced psychosis, or developmental delay.



	PF	RP	BP	GH	VT	SF	RE	MH
Series1	57	56.9	62.1	60.1	42.7	45.9	52	41.6
Series2	57	56.9	62.1	63.9	45.8	51.4	36.4	35.9
Series3	52.8	56.9	62.1	57.7	49	40.5	32.6	35.9
Series4	48.6	56.9	62.1	57.7	45.8	35	40.3	24.7

Figure 5. Legend: PF=physical functioning, RP=role-physical, BP=bodily pain, GH=general health, VT=vitality, SF=social functioning, RE=role-emotional, MH=mental health

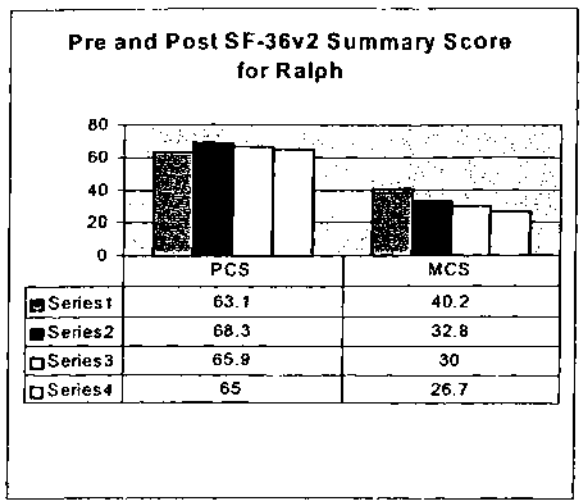


Figure 6. Legend: PCS=physical health score; MCS=mental health score

The responses to the four interviews that were conducted after completion of the MOS SF-36v2 are recorded in Appendix E. Ralph was open and receptive to learning how dance/movement therapy might effect his quality of life. He stated, "I know how to stay sober but I want to learn the other things." During the second interview, he re-iterated this point by stating "I'm a hyper person and I just think it can teach me how to relax". His responses in the third interview indicated that he met his expectation of participation by learning ways to relax. He was pre-occupied with outside occurrences during the fourth interview as his responses justly reflected. He had difficulty verbalizing the difference between verbal group therapy and dance/movement therapy function and benefits.

The following are field notes taken by the researcher. Language from Laban Movement Analysis and the Kestenberg Movement Profile are used throughout for

description of movement. The reader should refer to the movement glossary Appendix G for definitions of these terms.

Description of Subject. Ralph is a 48-year old Caucasian male of moderate build. He has a primary diagnosis of Bipolar Disorder, Schizophrenia Chronic Residual Type, and Polysubstance Dependence (cocaine and alcohol). He was diagnosed with HIV and Hepatitis C in 1990. He reported that his polysubstance abuse began at age 10. The only medication that he receives is a mood stabilizer. He has full use of Efforts with preferential combinations of Flow, Space, and Time. He also uses pre Effort qualities of Gentleness and Straining for Weight. There was no preference established for either fighting or indulgent Effort qualities.

- Session 1

Ralph presented with high anxiety and high energy as he quickly walked down the hall to the treatment room. He was very courteous and helpful in setting up the radio. He surveyed the room and seemed unsure where he should sit. I asked him how he was feeling today and he replied, "I'm hyper". He maintained constant motion with gestural hand movements and asked several questions about the nature and purpose of the study. I reviewed key components of the consent form that outlined the study.

I suggested that we warm-up using breathing techniques. His breathing was shallow even when I prompted and modeled for him to go deeper. This led to mirroring and we took turns in leadership. During his turn, he stated, "I don't know what to do, okay, here we go". He was able to turn his anxious discharge of energy into even goal directed movement. He talked about his history of addiction and childhood family structure. He displayed and verbalized anger regarding the breakup of his family at a young age. He became tearful in response to the song that was playing and shared memories of happier times.

Ralph identified coping mechanisms in recovery and proclaimed "I gotta get it right this time". He had a positive self-image and was able to focus on his needs. He asked if we could use the ball so we stood up and tossed it back and forth. He instructed "be gentle, I like to be calm". His breathing became fragmented and separated. He laughed and acknowledged "I feel like a child; I like to have fun". He made a conscious effort to remember my name and often asked "what do you think?" during conversation. His Effort/Shape preferences included combinations of Bound flow, Indirectness, and

Quickness with advancing and retreating. I noticed that he used flaccid Weight while sitting and standing. We ended by taking slow deep breaths.

- Session 2

Ralph entered the room with a cheerful affect. He immediately set up the radio and arranged two chairs for us to sit on. He did not want to select the music saying "whatever you pick is fine". He inquired about the 'feeling' flashcards and began to look through them. He acted out and discussed the first two flashcards then continued to read through the deck. His use of breath was a shallow huff that had a depressed sinking quality. He asked me to define the feelings that he was not familiar with and proceeded to display examples of when he felt that way. He made a collage of the flashcards that he liked and discarded others stating "I don't do that no more". These reflected strong, powerful, or negative emotions. Ralph discussed a conversation that he had with his mother and expressed concern about his brother's potential to relapse. He became tearful twice stating "I just want to go home". We reviewed his collage of flashcards and began to play with the balloon.

He was grounded in the vertical plane with evenly distributed passive Weight when standing. He had difficulty focusing on one task for extended amounts of time and displayed inadequate transitions between tasks. I saw more use of pre-Efforts (Gentleness, Vehemence) when moving. I asked him to select the feelings that he most identified with. The session ended with a handshake as he projected "I'm gonna miss you when this is over".

- Session 3

Upon entering the room, Ralph looked around then grabbed the ball and displayed basketball type movements. He dribbled the ball, completed a quick shuffle and spin, and inquired "what are we gonna do today?" He motioned towards the chairs asking "can I sit here?" referring to the sofa in the corner. He continued to bounce the ball while discussing his HIV history "I found out when I was in prison. I thought I was going to die in prison but they said I was just a carrier". His affect became more solemn and depressed with spurts of energy. He reflected, "I've never been sick from it [HIV] and don't take medication. I've had HIV for thirteen years, I'm lucky". He displayed lengthening and shortening in the torso when speaking.

He expressed concern about having "swing moods" stating "I don't know where they come from but I just want it to stop". I asked him about the diagnosis of schizophrenia and he stated that he used to hear voices when he was in prison because he was in solitary confinement for fourteen months due to aggressive behavior. He further stated, "I don't hear them no more, that was the only time because I was going crazy in that room". We bounced the ball back and forth in a controlled manner then he wanted to use the cush ball instead. He labeled his feelings as "scared" and "tired" in reference to his HIV status and substance abuse problem. He often paused and asked "what do you think?" He seemed more focused and organized during this session and he was able to make smoother transitions between tasks. I noticed that he could also tolerate movements and topical discussion for longer periods of time. He primarily used fighting

Effort qualities with combinations of Bound flow, Directness, and Quickness. The session ended with a handshake.

- Session 4

Ralph began the session by stating, "I really like meeting with you. What's gonna happen when this ends?" I explained that our interaction was time limited and he appeared saddened that we would not meet beyond the study. With child-like exuberance he looked at the scarves and removed them from the bag. As he set up the radio, he announced "I feel good today, you know, about my life". He proceeded to talk about being inspired by a friend who was also in recovery.

After warming-up with stretching and breathing using the scarves, he arranged two chairs in close proximity. We sat down and continued with mirroring while he discussed future goals of going to a halfway house. He stood up again and playfully manipulated the scarves and created a game for us to play. He used more space in the room with Free, Indirect, and Quick movements twirling and shaking the scarves. He continued to use flaccid Weight qualities. Ralph displayed quick affect changes transitioning between smiling, concentrating, and sadness. We ended with dancing slowing to stillness and use of breath.

- Session 5

Ralph reported excitement about achieving Level IV status which has more responsibility and privileges on the unit and in the community. He stated, " my recovery and sobriety comes first so I have to be careful when on pass [unescorted community outing]". He inquired about how not to worry about other people's behavior specifically his brother. We were able to brainstorm and role-play several coping strategies that he may try when he feels that way. We listed relaxation techniques including reading, listening to music, breathing, or having quiet time. He displayed quick affect changes from hyper indirect restlessness to tearfulness to smiling. He looked at me and stated "I just want to be one of those happy guys. I don't like these swing moods". We continued to talk about relaxation techniques and he projected "I want to do simple things like go to the park, go to the zoo to feed the monkeys, or just take a walk with my mom or my girlfriend". He let out a sigh and said, "I'm tired Angela, I don't want to get high or get in trouble no more". He initiated exercise movements and was able to follow deep breathing exercises. He was perceptive of my movement transitions and able to mirror them for a very brief period. His movement style consisted of all fighting Effort qualities that looked more like pre-Efforts of Bound flow, Directness, Strength, and Quickness. He had more of an internal focus today with obvious difficulty modulating his mood and maintaining focus on the task.

- Session 6

Ralph assisted to set up the radio and reviewed the music selection. He arranged two chairs in close proximity so we could look at the CD's together. He discussed some of the artists and stated "I feel good today. I'm on Level IV and I escorted two of my peers to appointments this week". He reflected that while he was out in the community

he was thinking "wow, this is what the real world looks like sober". He tried hard to maintain a peaceful front amid discussions of violent behaviors he exhibited in the street and in prison. He became excited as he shared having received his SSI approval and the notification of retro checks that they owed him. He discussed wanting to give the money to his mother so she could find some place nice to live. I sensed that he felt responsible for his mother's happiness and inquired about his need for housing upon discharge. "I just want a room some where nice like a recovery house".

His affect brightened as he discussed spirituality and religion. Ralph was very hopeful about his future and expressed a desire to continue spiritual relationships with friends upon discharge from the program. He initiated stretching and reaching movements then decided to put on some music and toss the ball around. Ralph was able to modulate and channel energy appropriately. He was also able to maintain focus to tasks for extended periods of time. He moved his chair further away so that we could bounce the ball to each other and I asked him to use more force when discharging the ball. He tried this a few times then moved his chair again stating "I want to be near you". He displayed some difficulty with separation so we ended with mirroring and breathing together.

- Session 7

Ralph appeared to be under the weather and his affect was more mellow than I had seen in previous sessions. He helped to set up the radio and selected the music. He complained of feeling "slowed down" today. He seemed concerned about this stating, "I'm not used to this feeling". He arranged two chairs in close proximity and reported having a good time with his mother and female friend over the weekend.

He initiated movement interaction and expressed excitement about the task to discuss how he views himself. He reported, "I feel good today in my recovery". I invited him to write his thoughts and feelings into a poem about his sense of self. After completing the first line he was able to really think about and decide how each verse flowed. He seemed proud of his accomplishments saying "you go boy!" He checked with me for approval "does this sound okay?" Upon completion of the poem he read it over then asked if I would read it. I began to read: *I'm a loving caring person; I'm wondering where I'm going to be in 6 months; I want to hear some good music; I want to see myself sober; I want a normal and sober life; I feel good about myself today; I worry about my mom and my brother; I cry over memories; I understand about life today; I say I believe in God; I dream about being sober and doing nice things; I'm trying to learn all I can to stay focused; I hope that my brother stops drinking soon.* He suggested that we sign it so that he would remember our work together. I asked him if he wanted to create a dance for his poem but he did not. I asked him what the title of the poem was and he paused then said "Ralph's feelings and thoughts". He became sad when it was time to leave further displaying difficulty with separation.

- Session 8

Upon entering the room Ralph assisted with setting up the radio and props. He inquired "whatcha got today, buddy?" He proceeded to review the music selection and

decided to listen to a yoga meditation CD. "This will relax me, it sounds like Indian music" was his rationale and reaction to the music. When reminded that today was the last session, he became tearful exclaiming "I know". He experienced a temporary loss of emotional control but he was able to regain composure. I presented him with a thank you card and a souvenir box that he could decorate as he wished. He requested that we read the card together and review the poem he created last week. He carefully and thoughtfully decorated his box and stated "I like this, I'll keep all of these gifts on my nightstand". He had full use of Efforts with a preference for indulging qualities (free flow, indirectness, and lightness). When reviewing themes of the previous sessions, he again displayed a temporary loss of emotional control proclaiming "I never had friends growing up". I asked him if he wanted to end with a goodbye dance but he stated "I just want a hug". We ended with a handshake and words of appreciation and encouragement.

Ralph used limited amounts of space in his movement expressions. He continually displayed shape flow attributes of advancing, retreating, and widening in the torso and upper body. His use of breath was shallow and he appeared to have difficulty controlling his breath to go deeper in the chest and torso. For many of the sessions, Ralph initiated and maintained a shared space with the therapist preferring to be in mid reach kinesphere. He also, initiated touch in conversational movement patterns with lots of gestural movements of the hands and arms.

Overall Ralph's perceived quality of life was consistently reflected across methods and measures. When he started the intervention phase, he had some difficulty modulating impulses physically and mentally. They seemed to be more controlled up until the final session. He initially needed frequent validation from the therapist but became increasingly self-reliant. There were also incidents of poor body boundaries and rapid development of attachment early in the intervention phase. In general, Ralph expressed appreciation for the relationship that was developed with the therapist.

Cross Case Comparison

Because the MOS SF-36v2 vitality subscale (VT) measures a phenomenon that manifests the mind/body integration, and because all three subjects reported improvement in that aspect, it was selected for further examination. The vitality subscale (VT) was an indicator that each subject's quality of life was effected in part by the dance/movement therapy intervention. There was an increase in vitality for Lucille and Ralph while Peter's score was stable between the 1st and 2nd baseline scores where the intervention occurred (see Figure 7).

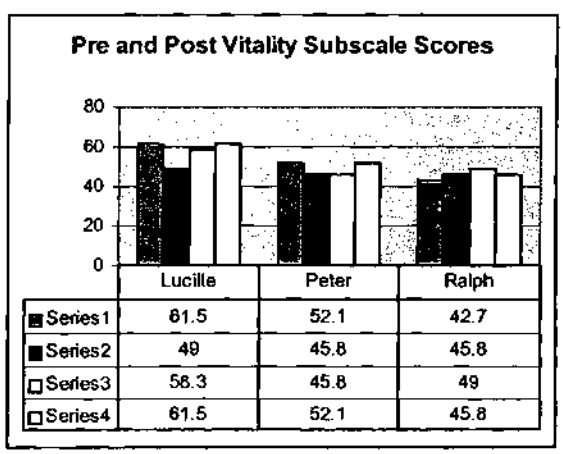


Figure 7

CHAPTER 5

DISCUSSION

Because there were various similarities between subjects in responses on all three data sources, observations can be made across cases. The results of the study partially support the hypothesis that dance/movement therapy impacts quality of life in mental and physical health for the study participants. The MOS SF-36v2 physical health summary scores implicated improvement of physical functioning level during the post intervention phase. However, mental health summary scores decreased from one baseline phase to the other. In this respect, the relationship between physical health and mental health is uncertain. Regardless, results across all methods and measures of data were consistent during a specific time frame. Individual patterns in quality of life were identified and each subjects' level of awareness, coping, and acceptance of their diagnostic status were described. As previously stated, the number of subjects (N=3) prohibits generalization to an entire population.

Cleary, et al (1993) determined that symptoms are the most specific patient-reported measure of health status and perception of quality of life. This was true for both Lucille and Peter who were experiencing common cold related symptoms like congestion, sore throat, thrush, or diarrhea that they attributed to being HIV-positive. This belief was furthered by the need for stronger antibiotics to kill the bacteria affecting

their health. In contrast, Ralph's MOS SF-36v2 physical health scores were above that of the general US population which coincided with his claim of "never being sick before". Mind/body therapies like dance/movement therapy have been shown to increase quality of life, reduce pain, and improve symptoms for people with chronic diseases and health conditions (Dupler, 2001). This inference was supported by all three subjects' proclamation that dance/movement therapy relaxes them and makes them feel good. Co-occurring disorders addressed by the dance/movement therapy intervention and the level of client focus indicated that Lucille considered her addiction to be primary, Peter was most concerned with his addiction and HIV diagnosis, and Ralph focused on his addiction and mood disorder. Likewise the consistency between measures reflected that Lucille became more autonomous, Peter was able to express thoughts and concerns regarding his HIV diagnosis, and Ralph valued social support in his recovery from drugs.

Eller (2001) reported that past studies have shown that patients with HIV had significantly lower quality of life measures. The current study has not found that to be the case but that measures have been within the standard deviation for the general US population norm. The only exception to this was Ralph's mental health summary scores which were significantly lower than the norm. The researcher attributed this decrease in quality of life to opening issues on a deeper level during treatment; thus, evoking feeling more and more anxious. Subsequently, after eight dance/movement therapy sessions, it was like the beginning of treatment especially for Peter whose responses across measures indicated the most improvement. Furthermore, Swindells, et al. (1999) and Douaihy and Singh (2001) determined that quality of life is influenced by social support, coping style,

and hopelessness. This aspect was addressed in the intervention phase where the subjects discussed and addressed issues around instillation of hope, coping strategies, and relaxation techniques. Each subject shared common goals for the future regarding living arrangements and attainment of gainful employment. The therapist's role as one who can inspire hope in others was significant as reported by all three subjects in facilitating a safe supportive atmosphere. The positive mood experience that comes from a renewal of hope, particularly among those who are struggling with illness, reaped health benefits that cannot be underemphasized in the health sciences (Salovey, Detweiler, Steward, & Rothman, 2000). Foglietti (1995) and Aldridge (1993) confer that hope improves and enhances quality of life for patients with HIV disease.

There is some evidence that the chronic use of coping styles that promote either positive or negative moods is associated with a range of health outcomes (Salovey, Detweiler, Steward, & Rothman, 2000). Interventions that help people process and confront traumatic life events produce significant improvements in health functioning (Salovey, Detweiler, Steward, & Rothman, 2000). Berry and Pennebaker (1993) proposed that the effectiveness of many common expressive therapies like dance/movement therapy would be enhanced if clients are encouraged to both express their feelings nonverbally and to put their experiences into words. Inherent in dance/movement therapy is the premise that patients can recall, experience, and reexperience feelings and life situations as a result of the body-mind inter-relationship (Stark & Lohn, 1989). These benefits have been reported despite the fact that people experience considerable negative affect during the time they are writing or talking about

the trauma (Salovey, Detweiler, Steward, & Rothman, 2000). This seemed especially true for Peter who recognized that he could successfully portray movement stories and describe the experience in meaningful detail. The creation and choreography of the poem had a similar effect for Lucille as she repeated the movement sequence three times. Likewise, the 2nd baseline interview responses seemed to be more elaborate and authentic for all three subjects. For example, in the 4th interview Peter stated, "I think this is a good thing; this study; it makes me feel that someone or some people are interested in how I feel emotionally *and* physically with this disease [HIV] [*italics added*]." Likewise, Ralph and Lucille both reported that dance/movement therapy helped to relieve stress and tension.

Although the comorbidity of depressed mood and increased reports of physical complaints is well documented, our understanding of the specific mechanisms that link emotional states and physical health is less certain (Salovey, Detweiler, Steward, & Rothman, 2000). In general, negative emotional states are thought to be associated with unhealthy patterns of physiological functioning, whereas positive emotional states are thought to be associated with healthier patterns of responding in both cardiovascular activity and the immune system (Salovey, Detweiler, Steward, & Rothman, 2000). Tension in specific body parts relates to the resolution of conflicts by the repression of basic effects; for example, 'holding' in the chest area is considered indicative of repressed feelings of needing and longing (Schmais, 1974). This was evident during the intervention phase in Lucille's use of body armor to distance herself from others emotionally. Attention to the association between depression and HIV disease status in

African American women, as well as plausible confounding methodological issues, has to date lagged far behind research on men with HIV (Jones, Beach, & Forehand, 2001). Both Peter and Ralph openly displayed and discussed feelings of depression and the role-emotional subscale of the MOS SF-36v2 reflected as such.

Perhaps movement evokes a fear of loss of control and/or embarrassment by expression of the inner self. Therefore, objectives of dance/movement therapy, when used to support the patient's recovery, should include:

1) to facilitate identification and spontaneous expression of feelings for increased self awareness;
2) to develop tolerance for and transforming of stressful feeling states;
3) to provide an experience of support for facilitation of trust in others, thereby decreasing isolation; and
4) to explore more adaptive ways of meeting emotional needs (Thomson, 1997).

The held upper body position by Lucille and the flaccid use of weight by Ralph could both represent guardedness against losing control. Although there were times that Ralph became emotional, he quickly recuperated and re-organized himself. During the 2nd baseline interview phase, Peter made a self-assessment that participation in the dance/movement therapy phase allowed him to be who he really is. He stated, "from doing it here [showing feelings] I really got a chance to talk about it and I feel as though I'm not putting on a façade anymore I'm being who I really am."

Dance/movement therapy is often an easy way for a person to express emotions, even when his or her experience is so traumatic he or she can't talk about it (Boughton,

2001). Nonverbal media employed by dance/movement therapists tap emotional rather than cognitive processes and evoke responses more directly and immediately than traditional verbal therapies (Zwerling, 1979). This change can be seen in Lucille. In the beginning of the study, her only expectation was to assist the researcher in completing the study. Towards the end of the intervention phase she was able to recognize things that were beneficial for her. The underlying premise of dance/movement therapy is that when people dance, they are expressing highly significant emotions (Boughton, 2001). After experiencing dance/movement therapy, they can talk about their feeling more freely and tear down the barriers they have erected between themselves and other people (Boughton, 2001). This was accomplished by all three subjects evidenced more so during the intervention phase and the 2nd baseline measures. Zwerling (1979) wrote that creative arts therapies are reality-based and provide a more immediate and real link to a patient's experience than something portrayed only verbally.

The dance/movement therapy sessions addressed issues directly concerning quality of life by working on a body level. Issues such as emotional body awareness, perception of quality of life, coping strategies and relaxation techniques, instillation of hope, and sense of self were addressed in movement through exploration and use of props. As revealed in the MOS SF-36v2 vitality subscale, the 2nd baseline interview responses, and the researcher clinical field notes, the therapeutic relationship was optimal. Concerning dance/movement therapy pioneer Marian Chace, Chaiklin and Schmais (1993) wrote "employing her keen sensitivity and skills, she was able to incorporate the emotional content of the patient's behavior into her own movement

responses; she literally expressed 'I know how you feel' in movement terms, thus establishing affective, empathic interactions" (p. 79). It is the belief of the researcher that the therapeutic relationship was key to facilitating change for the study participants. When describing the difference between dance/movement therapy and other forms of therapy, Lucille linked its benefits to person of therapist: "you can put your feelings into motion and it's Angela". During the dance/movement therapy sessions Ralph indicated verbally "I'm going to miss you when this is over" and nonverbally, by arranging chairs in close proximity, suggesting that he valued the therapeutic relationship.

A potential limitation of the study is that possible short-term problems encountered by patients that may have influenced their responses were not specifically addressed. Because the validated questionnaires used are recommended for assessment of patients participating in research studies and applications in clinical practice focusing on results for individual patients, it is believed that the findings of this study accurately reflect the situation of patients with co-occurring disorders (Ware, Kosinski, & Dewey, 2000). Interpretation of the data is dependent on the reliability of reported behaviors by the subjects. Therefore, a limitation of the study is the validity of such reporting. The question of whether self-report is valid in this population is controversial, but reliability was maximized by using three forms of data: the standardized instrument, the interview method, and evidence from dance/movement therapy sessions (Silberstein et al, 1994). The elusive life qualities inherent in creative activities-joy, release, satisfaction, simply being-are not readily susceptible to rating scales like the MOS SF-36v2 (Aldridge, 1993). The survey instrument was further limited in the results for Ralph as was recommended

by Ware and Sherbourne (1992) for studies of severely ill populations, it may be desirable to add a supplemental battery of items to represent the extreme low end of the continuum defined by some health scales. The role of the research assistant may have also limited this study, as a relationship seemed to have formed with each subject. Despite these limitations, the results show that it is possible to evaluate quality of life in heterogeneous, HIV-infected populations although the sample size was small.

In the present study, therapist's clinical field notes contain many qualitative descriptions of participants' movement responses. These descriptions, from Laban Movement Analysis, are potentially valuable indicators of inner state (North, 1972) or predictions of clinically relevant change (Bartenieff, 1980). It is beyond the scope of the study to attempt a correlation of these observed qualities with quality of life changes. However, further research may be improved by controlling for short-term problems that may arise for subjects. This could be accomplished by extending the warm-up phase or incorporating a short debriefing before administration of each measure. A suggestion to improve outcomes if the study were to be repeated would be to videotape the dance/movement therapy sessions. This would allow for inter-rater reliability in having the movement data coded for quality of life characteristics. At present, this would prove challenging, as the literature search did not yield any research articles correlating dance/movement therapy factors with quality of life measures.

A potential threat to validity was the fact that in addition to working with Lucille and Peter individually for the intervention, they previously participated in weekly dance/movement therapy groups facilitated by the researcher prior to initiation of the

study. This proved to be potentially confusing for them, as evidenced by some of the responses during the interviews. Although the exclusion criteria stipulated persons with thought disorders, one of the subjects was later revealed as having schizophrenia (chronic residual type). The decision to include this subject was based on the initial nurse referral and review of the clinical chart, which indicated that he was not currently receiving treatment for this disorder. He did not receive anti-psychotic medication at the time and during the initial screening for inclusion it was the clinical impression of the researcher that he was developmentally delayed.

This study does not provide a conclusive answer to the discussion on how dance/movement therapy impacts quality of life. However, it does offer a foundation from which to build future research in this area. There is a need for more literature based and research oriented information about the benefits of dance/movement therapy for clients with co-occurring HIV, addiction, and mood disorders. Not only would this information be beneficial for the field of dance/movement therapy but also in the bridging of gaps in treatment related services.

CHAPTER 6

SUMMARY AND CONCLUSIONS

Movement is life. It was the purpose of this study to evaluate dance/movement therapy impact in measures of quality of life regarding mental and physical health issues. Dance/Movement therapy as a form of psychotherapy introduced playfulness and fun in connecting to self and others without the use of illicit substances. Findings show that physical health functioning increased during the course of the study but mental health functioning decreased. Theories of health-related quality of life, co-occurring disorders, and HIV-positive status were defined as well as implications for the inclusion of dance/movement therapy as an additional resource. Movement experiences lead to a greater capacity or acceptance of body-self and coping strategies of the social self (Pallaro, 1996). Awareness of the body-self lead to enhanced awareness of one's own affective dimension of experience and consequently lead to psychological change (Pallaro, 1996).

The implications for dance/movement therapy and interdisciplinary communication (i.e. addictions treatment) could prove to be beneficial in enhancing client services. Treatment would need to continue to address issues of death and dying and depressed mood. It may also be beneficial to implement a standardized mood assessment instrument in future research. For programmatic development, the staff

would need to receive training in HIV sensitivity, psychosocial issues, and dance/movement therapy concepts.

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APPENDIX A

Drexel University
Consent to Take Part
In a Research Study

1. Subject Name: _____

2. Title of Research: Dance/Movement Therapy Impact on Quality of Life in Clients with Co-occurring HIV, Addiction, and Mood Disorders

3. Investigators' Name: Sherry Goodill, MCAT, ADTR, NCC, LPC and Angela Tatum Fairfax, BA, RPRP

4. Consenting for the Research Study: This is a long and an important document. If you sign it, you will be authorizing Drexel University and its researchers to perform research studies on you. You should take your time and carefully read it. You can also take a copy of this consent form to discuss it with your family member, physician, attorney or any one else you would like before you sign it. Do not sign it unless you are comfortable in participating in this study.

5. Your Rights to Privacy: Starting April 14, 2003, a new federal law called HIPAA (Health Insurance Portability and Accountability Act) Privacy Act will come into effect. This law prohibits anyone from seeing your PHI (Protected Health Information) without your consent. Therefore, we are asking your consent to allow us to have access to your personal PHI for the purpose of doing this research which may include reviewing information in your chart.

6. PURPOSE OF RESEARCH:
You are being asked to participate in a research study. The purpose of this study is to find out if dance/movement therapy can improve quality of life for persons who are diagnosed as having co-occurring HIV, addiction, and mood disorders (i.e. depressed mood or elevated mood as defined in the DSM-IV-TR and diagnosed by the psychiatrist).

   You have been selected because you meet the diagnostic criteria and you are in a residential treatment unit at Girard Medical Center (GMC) in Philadelphia,

Pennsylvania. There will be a total of three participants in the study all of whom receive services at GMC and meet the inclusion criteria.

Participation in this study is strictly voluntary. Persons may choose to not participate or stop participation in this research project at any given time. Participation may end if you are unable to attend at least six of eight dance/movement therapy sessions as scheduled. You will be able to continue with the level of service you are currently receiving.

7. PROCEDURES AND DURATION:
The research study will last for eight weeks. In the first two weeks you will be interviewed and asked to fill out some forms. For the next four weeks you will participate in dance/movement therapy sessions twice a week. The researcher will be keeping field notes of the observations of all of the sessions. During the last two weeks you will be interviewed and asked to fill out some forms.

- You will be interviewed by a Girard Medical Center staff person four times throughout the study. The first interview will be conducted at the beginning of the 1st baseline phase. You will also complete a health-related quality of life questionnaire called the Medical Outcome Study Short Form-36 (MOS SF-36) Questionnaire four times throughout the study after each interview.
- The second interview and completion of the MOS SF-36 will be conducted prior to the intervention phase.
- During the next four weeks (intervention phase) you will receive eight sessions of individual dance/movement therapy treatment provided by the researcher. The dance/movement therapy sessions will consist of four stages including warm-up, theme development, cool down, and closure.
- The third interview and completion of the MOS SF-36 will be conducted prior to the 2nd baseline phase. No dance/movement therapy will be provided.
- The fourth interview and completion of the MOS SF-36 will be conducted at the end of the 2nd baseline phase.

8. RISKS AND DISCOMFORTS/CONSTRAINTS:
There is a possibility that physical activity may cause brief and mild fatigue, a minor injury such as twisted ankle, or a small bruise. You may have emotional reactions or feel anxiety when talking or thinking about your mental health symptoms, addiction, and HIV status with the dance/movement therapist or interviewer. However, clinical and emotional support will be provided for each participant by the nurse on duty and/or your unit counselor.

9. BENEFITS:
There may be no benefits in participating in this study. The benefits of being involved in dance/movement therapy include support and assistance to you and the

healing process. It is also intended that participation will "help" you to attain skills that may be used beyond the scope of this study.

10. REASONS FOR REMOVAL FROM STUDY:
You may be required to stop the study before the end for any of the following reasons:
    a) Change in medical condition;
    b) If all or part of the study is discontinued for any reason by the investigator, university authorities, or government agencies; or
    c) Other reasons, including new information available to the investigator or harmful unforeseen reactions experienced by the subject or other subjects in this study.

11. VOLUNTARY PARTICIPATION:
You understand that being in this study is voluntary. Your health care will not be affected in any way if you decline to be in or later withdraw from the study.

12. IN CASE OF INJURY:
Treatment for Injury:
If you have any questions or believe you have been injured in any way by being in this research study, you should contact Sherry Goodill at telephone (215) 762-6926. Drexel University College of Medicine will not be responsible for costs related to injury. If you are injured or have an adverse reaction, you should also contact the Office of Research Compliance at (215) 762-3453.

13. CONFIDENTIALITY:
In any publication or presentation of research results, your identity will be kept confidential, but there is a possibility that records which identify you may be inspected by authorized individuals such as the institutional review boards (IRBs), or employees conducting peer review activities. You consent to such inspections and to the copying of excerpts of your records, if required by any of these representatives.

14. CONSENT:
- I have been informed of the reasons for this study.
- I have had the study explained to me.
- I have had all of my questions answered.
- I have carefully read this consent form, have initialed each page, and have received a signed copy.
- I gave consent voluntarily.

_____ _____

Subject or Legally Authorized Representative Date

Investigator or Individual obtaining this Consent/Permission _____ Date _____

Witness to Signature _____ Date _____

Individuals Authorized to Obtain Consent

Name	Title	Day Phone #	24 Hr. Phone #
Sherry W. Goodill	Director Dance/Movement Therapy Education Drexel University College of Medicine Primary Investigator	(215) 762-6926	(215) 762-6926
Angela Tatum Fairfax	Co-Investigator	(215) 762-6926	(215) 762-6926

APPENDIX B

Interview Questions
Interview #1 and #2

Interviewer instructions: Greet the subject in pleasant manner (e.g. "Hello _____, my name is _____ and I will be conducting an interview with you as part of the study that you agreed to participate in"). Inform the subject that you will begin the tape recorder at this point. You may repeat the questions as often as requested. To get the most pure and well-developed answer you may follow up on a question by requesting the subject to elaborate (e.g. "What do you mean by that?" or "Can you tell me more about that?").

1. What are your expectations of participating in the research study?

2. What are your anxieties about participating in the research study?

3. How do you think dance/movement therapy can effect your quality of life?

4. How do you think dance/movement therapy differs from other forms of therapy?

   Examples: verbal therapy, art therapy, music therapy, recreation therapy

Interview Questions
Interview #3 and #4

Interviewer instructions: Greet the subject in pleasant manner (e.g. "Hello _____, my name is _____ and I will be conducting an interview with you as part of the study that you agreed to participate in"). Inform the subject that you will begin the tape recorder at this point. You may repeat the questions as often as requested. To get the most pure and well-developed answer you may follow up on a question by requesting the subject to elaborate (e.g. "What do you mean by that?" or "Can you tell me more about that?").

1. What are your anxieties about participating in the research study?

2. How do you think dance/movement therapy can effect your quality of life?

3. How do you think dance/movement therapy differs from other forms of therapy?

   Examples: verbal therapy, art therapy, music therapy, recreation therapy

4. How will you use the dance/movement therapy skills you learned in the future?

APPENDIX C

Interview Transcripts

"Lucille"

Note: the uses of parentheses indicate insertion of paralingual features such as pauses or laughs and brackets indicate references or inferences.

Interview #1

1. *What are your expectations of participating in the research study?* I just want to help [researcher's name] get her degree and I feel privileged to be a part of it. I expect her to get her degree. *Do you expect anything for yourself?* No, I feel privileged just to be a part of it. I'm thankful and feel honored just to be asked to be a part of it. *Do you picture in your mind what you expect for yourself as far as participating in the study or what you can learn from it?* Well, if I do, that will be something extra. I'm pretty open-minded.

2. *What are your anxieties about participating in the research study?* I don't know. No.

3. *How do you think dance/movement therapy can effect your quality of life?* Well, I enjoy the [regularly scheduled group] class, I look forward to it because that's the only class where the whole unit gets together and we all have fun together because we bicker a lot. There's no bickering, we all enjoy ourselves because we're all together, so movement therapy it relaxes, makes you feel good, sometimes you work up a sweat, which is good, gives me some exercise, which I could definitely use and I have fun, I enjoy it. It makes me happy. It makes life a little easier. Nicer.

4. *How do you think dance/movement therapy differs from other forms of therapy?* Because I see it as a form of exercise also. It helps get my body in shape. It keeps me physical and gives me a chance to move and I like to dance. It's a therapy that's easier to do. It's easier for people. It's easier for me instead of sitting down and talking to somebody. I can move around, have fun, and enjoy it. *Are there other things that are different as opposed to recreation therapy, group therapy, or verbal therapy?* I can't think of any right off hand but because when you think of therapy you think about. Well, when you say the word 'therapy' the first thing I think about

is the psychiatrist dealing with the mind but movement therapy from what I get, and this is the first time I've ever heard of it, it's fun, it's enjoyable, it's something that's enjoyable. Other type of therapy, you kind of look at them, when you use therapy, you kind of back up your hesitant view, caution, uh oh. This is more so enjoyable. *Do you still feel that it addresses the emotional aspects and mental aspects?* It does, but just from experiencing it you don't even put the two together. You have to look for it, it's there but you don't really think about it. That makes it complicated, it's not complicated.

Interview #2

1. *What are your expectations of participating in the research study?* I expect to be helpful to [researcher's name]. *Are you expecting something for yourself?* No, I'm getting satisfaction from helping her.

2. *What are your anxieties about participating in the research study?* I don't have any.

3. *How do you think dance/movement therapy can effect your quality of life?* It can be a little more pleasurable, more relaxing, more comfortable, enjoyable. It makes the quality of life better.

4. *How do you think dance/movement therapy differs from other forms of therapy?* It's pleasurable. I don't know, when I think of therapy, I'm apprehensive. When you think therapy, you have some reservation but with movement therapy it's enjoyable. It's different, you can breathe different. It feels like a whole other side of the spectrum from being reserved to wanting to go to it. *What do you think the difference is?* Because I enjoy it, I have fun, I like to dance. I spent a good time of my life dancing. I danced for a living. I have fun with it. I've never really been in therapy of any type which means I have reservations about psychotherapy. It's nothing strenuous, nothing I have to think about, just let it flow.

Interview #3

1. *What are your anxieties about participating in the research study?* I don't have any anxieties.

2. *How do you think dance/movement therapy can effect your quality of life?* It can make it better. *In what ways?* It can make me happier. *How is it that you feel happier?* Because after participating I feel I've released some stress and I feel better

about myself, about everything in general. I don't know if it's the movement therapy itself or if it's [researcher name] but I think it's some of both. Her personality, her whole being is present and it makes you, well it makes me feel if I'm in a bad mood, she brings me out of it and if I feel bad, she makes me feel better. When we dance, it makes me feel happier. *So, it's the effort that you put in to it along with her?* She brings it out of me.

3. *How do you think dance/movement therapy differs from other forms of therapy?* I enjoy it. In all actuality, I usually look forward to it and that's the only [regularly scheduled] group where everybody in the community [unit] is together. And we all get along and have a good time. It's the only group that everybody feels the same about. Everybody lets down their guard and they can release the tension and the stress. Everybody deals with everybody else on the same level and when the hour is up, we close the group out, and everybody is feeling much better. It's all because of the atmosphere that it creates. Your movement is yours. Nobody can substitute that, they can imitate it, because it could change. You might feel this way and move one way this minute and then the next minute ...it helps to personalize it, to relieve the stress. That's what makes it great. In my recovery it gives me an outlet to use. Then I can put it into motion if I feel like using drugs. I can think about putting that into motion instead of thinking about doing them. *In your experience what is it that makes a difference than the verbal therapy group?* Because people can get into it and be themselves, do whatever they feel like as far as movement is concerned, how ever they feel and how they feel that their feeling should be expressed in movement is accepted. That's what she's looking for and everybody enjoys it. *What are you looking for?* Peace of mind. Like I said, I don't know if it's because you can put your feelings into motion or ... it's because you can put your feelings into motion and it's [researcher name]. The two together just makes it click. Whatever you bring, [researcher name] brings out the best in you. *How is your experience different, if it is different, in the group than in the individual sessions?* In the group I have other people there, individual is one-on-one, I get all of her attention. I appreciated it. I used it to the fullest.

4. *How will you use the dance/movement therapy skills you learned in the future?* I'm going to use them with my grandchildren. I've already thought about that. I'm going to explain it to them the best I can and I think that they'll enjoy it too. I'm going to tell my daughter about it. My grandson is 13 years old and he has some problems so he can release some stress. My daughter, I know she has some, and can release stress. So I'm going to teach them about it and I should be able to use it for the rest of my life. I'll definitely carry it on.

Interview #4

1. *What are your anxieties about participating in the research study?* I don't have any anxieties about participating in the research study.

2. *How do you think dance/movement therapy can effect your quality of life?* It can make the quality of life much better because it makes you...well, it makes me, I'm speaking for myself and how I feel about it, it makes me feel better. If I'm depressed, it brings me out of the depression and makes me feel happy. It makes me feel better than I felt if I'm feeling down. *Can you be specific to the dance therapy sessions you did with [researcher name]?* I didn't feel like being bothered. I guess I was in sort of a mood and I just didn't feel like it and I recognized it because the last time before that I didn't want to participate. But once I got in the room with her and started, she turned the music on and we checked in, that's what we usually do in the group, everybody takes a turn to check in and we start stretching and get into it, it got better as it went. *How about the individual sessions with her and your quality of life?* The last individual session has been a long time ago, actually. It makes me feel better...she makes me feel better. I'm fortunate in that aspect because she makes me feel better. We saw somebody else in the elevator that had on a tag that was Movement Therapy, I forgot her name, but we were bragging about it. There were some of my peers on the elevator too and we were bragging. We asked her since [researcher name] was getting ready to graduate if she was going to be able to come in and start the group. She said that she didn't know but she didn't think so. I think if somebody else did come, they would come into a good spot. They would have large shoes to fill but the people would be acceptable to it. They would be open to it. But to fill [researcher's name] shoes, nobody would be able to do that but we'd be open to it.

3. *How do you think dance/movement therapy differs from other forms of therapy?* You get more involved. I think. And it's easier to get involved. You're more willing to get involved. With other therapy, well when I think about it, I think about psychological problems, it's things that you need and you have to...there are problems and there's a negative side to it. But the dance/movement therapy is something that you want to get involved with. *Do you still address the problems, you think, in a way?* I don't think you go there with the same problems. You might have them but you're not thinking about them. They're the furthest thing from your mind when you come in there. *What about individual sessions where it was structured around different themes and so it asked you to look at some of them?* No, not the same problems that you would go to another therapy for. I don't think so. You expect it to be different because the name is movement and that gives you a certain expectation. Then once you get into it and see what it's about personally I just took it from there. It's more enjoyment, it's more fun. Other types of therapy seem more like work and they have more of a negative aspect.

4. *How will you use the dance/movement therapy skills you learned in the future?* They can be used any place but I wouldn't use them any place. Like today, for instance,

when you brought it up I was like no, this is not the place. People would have benefited from it but I didn't feel it was the type of atmosphere for it because it would have changed everything. It has to be in the right atmosphere. *Do you have a sense of when you might use it?* No, I haven't thought about that. *Do you think that there are some things that you will bring with you of those things that you've learned when you leave the program, for example? Any skills that you'll bring with you from it?* Yes, there are but that would be hard to pinpoint because different situations, different moods, different feelings, and atmosphere and people. But it will be interesting...I'll think about you. I'm going to keep a diary and maybe we'll run into each other and I can say 'guess what?'

APPENDIX D

Interview Transcripts

"Peter"

Note: the use of parentheses indicate insertion of paralingual features such as pauses or laughs and brackets indicate references or inferences.

Interview #1

1. *What are your expectations of participating in the research study?* My expectations are to find out or either let the people that interview me know some of my ways I feel about the disease and some of my health issues. Maybe you can get an evaluation out of it and maybe it can really help someone else or help me in finding a way to make my illness, if I ever do really get sick, more comfortable. *Are you thinking that you'll gain something particularly with the therapy sessions?* Yes, because even though I've had the disease for ten years I still feel as though there are things that I still don't know about it. I know about all the stuff you're suppose to do to prevent it or spread it but there's some more things that I might need to know, too.

2. *What are your anxieties about participating in the research study?* Anxieties? Nothing. I'm not ashamed of the disease no more. Just like somebody with cancer you have to take medication for that you have to take medication for this. I see it as part of the consequences of the lifestyle I've lived.

3. *How do you think dance/movement therapy can effect your quality of life?* I think it effects me where I won't be down all of the time. Where, somewhere I can have some fun. Sometimes it's good to have fun in life without being down about the disease. I never was anyway. Not after the first three years, after that it was good. I think it can help me just moving my body parts and not get down on myself. It's a time of day when we don't think about what we're doing, at least I don't anyway. It's a recovery thing and I have a little fun. I have anxieties about meeting women and telling them. Really getting into a serious relationship. That's the only real hang-up about it. My family, they're okay with it. I have a daughter who's 28 years old with two children and I haven't told her because she has a mental condition and I'm not sure how much she really understands. Besides her mother died a few years ago.

4. *How do you think that dance/movement therapy differs from other types of therapy?* It differs in a way where you don't have to be so much on your P's and Q's. In talk therapy sometimes you're looking for the right answer but you don't have to worry about the right movement or the right thing to say or anything. Just being in the flow and move how you feel. It clears your mind more. It's not stressful. Other therapies you have to really think about what you're going to say. Really contemplate what you're going to say whether it's going to hurt someone or hurt you or whatever but dance therapy is movement. Dancing, moving your body and your bones, feeling good and I like it. I act like a clown but now I'm starting to act like myself. Even in my family I'm the jokester.

Interview #2

1. *What are your expectations of participating in the research study?* My expectation is to learn how to have some fun as far as dance therapy and to release some pressure instead of being wind up all of the time. Maybe just to get loose. You know being in the program you have to go by rules and regulations and stuff. Dance therapy is a class where I just unwind. I can go in there and act crazy and do my dance. It feels good, because usually I'm the class clown, just to relieve some of that pressure off of me.

2. *What are your anxieties about participating in the research study?* No, not now. At first, as any human being would, I wanted to know what it consisted of. I wasn't worried or had any anxieties. But now it's fairly, I wouldn't say easy, but fairly acceptable. There's nothing wrong with it. When you start something new, you're a little apprehensive about it but now that I've talked to you, you seem to be a nice person so I don't mind.

3. *How do you think dance/movement therapy can effect your quality of life?* Well, really, I don't know. Dance therapy, sometimes, that stuff that you're doing might cause harm or might help. It might cause harm as far as being too strenuous and doing too much as far as health, bones, aches afterwards. So far it hasn't bothered me and in a way I think it's a good thing. I really think not moving has a lot to do with my shoulder hurting.

4. *How do you think dance/movement therapy differs from other forms of therapy?* All ways, I believe. I look at therapy as far as you sitting in someone's office and their asking you a whole bunch of questions about your family life and your past but this is ... I wouldn't even think of this as therapy really. I would think of this, like I said, dance therapy, you're having fun, relieving some stress and tension. *Do you think that it can help you address the same kind of things and feelings around your addiction, depression, or HIV?* I think it can help me as far as my feelings around

thinking that 'I can't do this' and 'I can't do that' physical wise but this tells me something different. If I put some effort into to it, I can do it. So far my health has been very well and I can do as much as normal people. And these questions you're asking me are hard for me to answer because I don't even think about it. I'm just like the other guy. The only way it feels different is as far as approaching women that the only thing I have a problem with especially if it's someone I really like. I haven't really come up with a solution of how I'm going to tell a person. There's someone that I talk to and she has it too and it makes it easier. I think about that a lot. Having someone in my life. What makes it so bad is now that I have the disease I'm ready to settle down instead of running around trying to be Cassanova or Don Juan. As far as my daughter, I feel bad about that because she's 28 and I was never really in her life. That's one reason why I'm doing this to be in my grandkids lives. My daughter's mother passed and at her funeral, I don't know if she knows I used drugs or not, but her mother died from a crack overdose but I went to the funeral. My daughter is a little, what they call slow, she told me at the funeral "Dad, I don't want you to leave me, too". I was thinking all of this time that she didn't know I messed with drugs.

Interview #3

1. *What are your anxieties about participating in the research study?* I really don't have any anxieties as far as maybe in the last couple of weeks of being tired because coming in from school forgetting that I had this session. Then after moving and talking it usually goes away.

2. *How do you think dance/movement therapy can effect your quality of life?* Well, I believe it helps my quality of life by doing something fun that doesn't require a whole lot of thinking or physical movement. I mean it's according to what kind of dance routine you do and me being 48 years old I don't really try to do too much movement. I mean I move my legs and move my arms. *So, you found something that works for you?* Yes, instead of trying to be like a teenager and going out breakdancing. It effected my quality of life as far as clicking, and being happy, and doing something different. Something that I wasn't used to before coming into recovery. *Did you realize different things about yourself during that process?* No, it wasn't different things. It was things that I knew was always there but I just never, with drug use and other things, I never took time to really bring them out. Like trying to be the so-called hard guy, tough guy whatever as far as showing feelings and stuff I really didn't do that well. From doing it here I really got a chance to talk about it and I feel as though I'm not putting on a façade anymore I'm being who I really am. And it feels good.

3. *How do you think that dance/movement therapy differs from other forms of therapy?* Well, with the dance therapy and with you, and [researcher name] as far as the

dancing and the talking, I think that I actually feel much more relaxed as far as dance therapy, as far as us being alone when no one else is around. I feel more comfortable. I think it's better for me in order to get things that I might want to say that I wouldn't say in a group of people or I wouldn't say to anyone else thinking that it's going further or thinking that whoever you're telling it to is saying 'it's a crock of shit'.

4. *How will you use the dance/movement therapy skills you learned in the future?* Well, I guess I'll use it as far as in the future as being able to move and dance. Looking at that as a good thing and for me to be able to still do that. Because you know some people in my predicament are not able to even do that. So I find it good and rewarding to be able just to do it. I feel for people that's handicapped and underprivileged and can't do the things I do or can't have the things I do. Like as far as the war that's going on now I feel sorry for the Iraqi civilians. People dropping bombs on the city, people getting hurt, that have nothing to do with the war. That really upsets me sometimes because I don't think that's fair. As far as my health a few months ago, it was deteriorating which my doctor told me. At one time before my health was just as good as it is now but I slipped as she told me and it convinced me this time. It's not really the health thing, you know, I'm just tired. It's time for me to stop. I'm too old. I didn't have my grandchildren in my life and they barely knew me. I went there this weekend and they ran to me and loved me because I've been there at least three times since I've been in recovery. That's a good feeling.

Interview #4

1. *What are your anxieties about participating in the research study?* I have no anxieties about it. It's okay. As a matter of fact, I think it's a good thing. As far as you doing research with me and with other people, that way you can get different opinions and different feelings of people with this disease. You know maybe you can analyze and see how different people tick with it. So, I have no anxieties.

2. *How do you think dance/movement therapy can effect your quality of life?* Well, dance/movement therapy with me, it affects me, it brings me up. Like if I'm in a depressed mood or down mood sometimes it brings me up and it makes me forget about things. And the movement therapy makes me aware of some things that I can't do anymore. As far as, it gives me a hint for me to not try to do something. I can feel the aches and pains and I say 'I know I can't do this now'. Just through the dance therapy, you might feel little aches and stuff. Like the other day I tried to...we went on an outing and I was playing basketball and like I said in high school and junior high I played basketball and one time before I took ten minutes and I was out of breath. This time it was a little better because I didn't play as hard. I guess with having the movement, dance therapy then doing that you're bones don't get as tight or as stiff as not doing anything. Just walking back and forth you move your bones in all sort of

ways. *Do you feel that the therapy has effected your quality of life?* Yes, I think it made it better somewhat. I mean in some instances it might have seemed like it was worse because its been a couple of times where I've done things and was hurting the next day. I believe in the long run it was more helpful than harmful. Psychological aspects, I really couldn't say because I never thought my quality of life...well, I'll put it this way, since being in here I never thought my quality of life was bad. Just being in here period, I feel I've had a pick up as far as my quality of life because I didn't dwell on the things that I was doing wrong as much because I wasn't doing them any more. I guess somewhat it did help the quality of life.

3. *How do you think dance/movement therapy differs from other forms of therapy?* With other therapy I think it really deals with your emotional and feelings more so than your physical aspects. Like with dance therapy, it's therapy for your physical body and physical being too because you're moving parts of your body and your joints. Where most other therapy is for the head and psychiatrist and counselors...its more an emotional therapy. I can see a person maybe getting in a car accident where they would get physical therapy. The way I look at dance/movement as like a physical therapy where you can move and get some of the kinks out. *Do you feel that you can express some of the emotional sides of you through the movement?* I really don't know about that because I know that when [researcher's name] had the sessions, she would ask me to express this certain feeling through your movement or express this one. I really don't know because I really don't have no idea of how to express your emotions in movement. Especially if you're not angry or happy. If you're just normal, it's hard to express. I can see you expressing it if you're mad at somebody. You might bang tables or push stuff or if you're happy with someone, you might jump and clap. But being on a normal emotion I wouldn't know how to put movement to that. *Did you do it?* I really don't know. I guess so. I thought I did it. I guess that would have to be judged or saw by the person giving me the therapy because I don't know. I guess I feel it as a true emotion of happiness or anger I guess you would feel it then. As far as anger, if your moving in a certain way to get the frustration out, I guess you would feel relief. I guess as far as being happy from some movements you would feel happier.

4. *How will you use the dance/movement therapy skills you learned in the future?* As far as, if I was to get sick or paining some where maybe I would move in a certain way if I could remember where the pain didn't hurt and don't move a certain way where it would hurt more. I guess that's what I would be aware of. I guess that's what dance therapy will help you. If this trouble don't come with you twenty years from now, you'll have to remember it. Twenty years from now, I'm 48 now, I'll be 68, I probably wouldn't remember it. I think this is a good thing. This study. It makes me feel that someone or some people are interested in how I feel emotionally and physically with this disease. And it's just not...I think a lot of people, as far as trying to make medicines, just like to experiment with people with HIV as far as trying this medicine and trying this for this one guy. I think sometimes they look at us like

ginuea pigs but this thing you're doing now don't seem like it. It seems like it's more about your feelings not how a certain medicine helped you. It's more personal about how you feel period. That's a good feeling in all for somebody to want your opinion or value your opinion or how you feel about yourself. Just having HIV I feel like it's another disease like cancer for a normal day I don't even think about it really. I think I'm just like anybody else who might have a ulcer, that might have cancer, that might have MS. It's just another medical issue that some people have. I know the way it's gotten by us, the people with HIV, I think that's more of a stigma on you than the disease.

APPENDIX E

Interview Transcripts

"Ralph"

Note: the uses of parentheses indicate insertion of paralingual features such as pauses or laughs and brackets indicate references or inferences.

Interview #1

1. *What are your expectations of participating in the research study?* How to stay sober and not get depressed. I'm always in jail and I want to learn how to live on the street. To learn something so I can relax myself when I'm by myself so when I get depressed I can think about what I learned here and do some dance therapy in my room. I never asked for help before I always went up state and did my time. I ain't going back to jail. Sometimes I think to myself 'what are you still doing hanging around here' but I know it's the devil trying to get me again.

2. *What are your anxieties about participating in the research study?* No, I know it ain't out to hurt me.

3. *How do you think dance/movement therapy can effect your quality of life?* It can make me relax. I don't know how to answer that. She [researcher] can tell me about that, we'll see. Why throw something away that can benefit me. I know how to stay sober but I want to learn the other things. I messed my life up long enough.

4. *How do you think dance/movement therapy differ from other forms of therapy?* Maybe relax my bones or something. I've never really had therapy before, I always went to jail. It makes me relax. I like it. The reason I want to do this is because I want to learn all I can. I always go to jail because I get hyped up and just do things. But maybe I can do some movement therapy instead. In talk therapy you just talk. If I can run after the drugs all my life, let me run after something good for me.

Interview #2

1. *What are your expectations of participating in the research study?* Learn how to relax more and deal with emotional problems and whatever else she [researcher] can teach me.

2. *What are your anxieties about participating in the research study?* No, I don't have that.

3. *How do you think dance/movement therapy can effect your quality of life?* I can learn something to make myself relax. I'm really stressed out. I don't know, we'll find out. I just want to get anything I can. You know, I'm a hyper person and I just think it can teach me how to relax.

4. *How do you think dance/movement therapy differs from other forms of therapy?* You're moving your body, relaxes your muscles. It eases my mind. *Do you think it's different from the primary groups that you have with your behavior specialist or the recreation group?* When I have the groups, I feel relaxed but then I leave. It's different. I take with me all the things I learn and write them down in a book. I never did that before. Maybe I'll be able to come back and get a job here as a janitor.

Interview #3

1. *What are your anxieties about participating in the research study?* I had a good time, I had happy times, sad times. No, I didn't get anxious.

1. *How do you think dance/movement therapy can effect your quality of life?* I enjoyed it and it relaxed me. I felt like a kid when I was with her [therapist].

3. *How do you think dance/movement therapy differs from other forms of therapy?* I learned something to relax myself.

4. *How will you use the dance/movement therapy skills you learned in the future?* When I get anxious or upset I'll sit down and regroup, rock in the chair, do a little exercise. It's hard for me to explain.

Interview #4

1. *What are your anxieties about participating in the research study?* Nothing, I just roll with the flow. I ain't anxious.

2. *How do you think dance/movement therapy can effect your quality of life?* When you're depressed you just use what you learned in movement therapy to ease tension. *How did you ease tension?* (deep breath) do a little exercise to get your mind flowing and your bones working and all that. I was stressing yesterday and [movement therapist] said to me 'go do what you learned in movement therapy' because I was walking the floor and I knew something was wrong, I wanted to know what [behavior specialist*] was doing. So I went in my room and starting rocking back and forth and wrote in my journal and I've been talking to [behavior specialist] in the journal and believe it or not I felt relaxed. (* behavior specialist took unexpected leave)

3. *How do you think dance/movement therapy differs from other forms of therapy?* In primary [group] we talk about things in life, right, but movement therapy you talk about when your stressed out. It's two different things. *Was the movement therapy about life?* Yes, it's about life. You're moving, you just sit in [behavior specialist] group. It makes me relax but sometimes in [verbal] group I get tense I don't know why; maybe because I'm not used to sharing. I calm down when I breathe in and out.

4. *How will you use the dance/movement therapy skills you learned in the future?* Go in my room, sit down, and breathe and do some exercise. I already keep a journal. The music brought out sadness. It made me cry. The memories of it. But it's good to cry and get it all out.

APPENDIX F

Glossary

The following terms are representative of a method for systematic description of qualitative change in movement and is a major product of the life work of Rudolf Laban and his co-workers (Dell, 1977).

Effort – a system which describes the dynamics of movement in terms of four motion factors: Space, Weight, Time, and Flow

Space – measures the quality of attention to movement displayed on a continuum between Direct (single focused) to Indirect (multi-focused); relates to one's attention (thinking)

Weight – measures the quality of how the weight is used in relation to gravity on a continuum from Strong to Light; relates to intention (being)

Time – measures the quality of the use of time on a continuum of Quick to Sustained; relates to decision (doing)

Flow – measures the degree of tension accompanying a movement on a continuum between Free to Bound associated with feelings; ease or restraint of action (feeling)

Fighting Efforts – Direct, Quick, Strong, Bound Flow give the image of flight or struggle against

Direct – channeling through or piercing space

Quick – fighting against time

Strong – compressing energy

Bound flow – movement that can be stopped at any moment through fighting one's own energies

Indulging Efforts – Indirect, Sustained, Light, and Free Flow allow movement to spread throughout

Indirect – meandering and spread throughout space

Sustained – melting and indulging in time

Light – floating into and overcoming gravity

Free flow – ongoing and continuous

Shape – system which describes how and where movement goes through space in terms of shape flow, directional movement, and shaping movement

Shape flow – movement that goes toward or away from the body growing and shrinking supported by breath

Directional movement – movement through space that is linear, arc-like, or spoke-like making a bridge to the environment

Shaping movement – movement clearly projected into and moving through space three-dimensionally in a sculpting manner

Body attitude – the constant carriage or stance of the individual in terms of spatial stress in a plane, areas of restriction, use of the torso, etc.

Kinesphere – individual's personal space measured from the center out as far as the limbs can reach

Reach-space – near-reach, mid-reach, far-reach

Body level – movement that includes use of torso and its shape, integration, and patterning of limbs and torso

Body boundaries – movement demonstrating one's ability to differentiate between self and others, objects and to attribute properties to them

Effort/Shape – a system of notating body movement providing researchers with a common language. It defines how the movement is done, rather than what is done, and appears in developmental hierarchy

Modulation – ability to control motoric behavior

Transitions – flow of motor activity from one sequence to another

APPENDIX G

Clinical Field Note Summary

Date: _____ Subject Code: _____

Theme/Goal: _____

Objective Description of Events:

Effort/Shape Qualities Present

Flow	____ Free	____ Bound
Space	____ Indirect	____ Direct
Weight	____ Light	____ Strong
Time	____ Sustained	____ Quick

Interpretation of Process:

Use of space:

Use of breath:

Body Attitude:

Relationship:

Repetitive Movement Phrases

Strengths/Weaknesses

A. Standard Self Report for Your Health and Well Being (FOUR WEEK RECALL)

Your Health in General

Please answer every question. Some questions may look like others, but each one is different. Please take the time to read and answer each question carefully, and mark an ☒ in the one box that best describes your answer. ***Thank you for completing this survey!***

1. In general, would you say your health is:

Excellent	Very good	Good	Fair	Poor
☐ 1	☐ 2	☐ 3	☐ 4	☐ 5

2. Compared to one year ago, how would you rate your health in general now?

Much better now than one year ago	Somewhat better now than one year ago	About the same as one year ago	Somewhat worse now than one year ago	Much worse now than one year ago
☐ 1	☐ 2	☐ 3	☐ 4	☐ 5

3. **The following questions are about activities you might do during a typical day. Does <u>your health now limit you</u> in these activities? If so, how much?**

	Yes, limited a lot	Yes, limited a little	No, not limited at all
a. <u>Vigorous activities</u>, such as running, lifting heavy objects, participating in strenuous sports	☐ 1	☐ 2	☐ 3
b. <u>Moderate activities</u>, such as moving a table, pushing a vacuum cleaner, bowling, or playing golf	☐ 1	☐ 2	☐ 3
c. Lifting or carrying groceries	☐ 1	☐ 2	☐ 3
d. Climbing <u>several</u> flights of stairs	☐ 1	☐ 2	☐ 3
e. Climbing <u>one</u> flight of stairs	☐ 1	☐ 2	☐ 3
f. Bending, kneeling, or stooping	☐ 1	☐ 2	☐ 3
g. Walking <u>more than a mile</u>	☐ 1	☐ 2	☐ 3
h. Walking <u>several hundred yards</u>	☐ 1	☐ 2	☐ 3
i. Walking <u>one hundred yards</u>	☐ 1	☐ 2	☐ 3
j. Bathing or dressing yourself	☐ 1	☐ 2	☐ 3

4. **During the <u>past 4 weeks</u>, how much of the time have you had any of the following problems with your work or other regular daily activities <u>as a result of your physical health</u>?**

	All of the time	Most of the time	Some of the time	A little of the time	None of the time
a. Cut down on the <u>amount of time</u> you spent on work or other activities	1	2	3	4	5
b. <u>Accomplished less</u> than you would like	1	2	3	4	5
c. Were limited in the <u>kind</u> of work or other activities	1	2	3	4	5
d. Had <u>difficulty</u> performing the work or other activities (for example, it took extra effort)	1	2	3	4	5

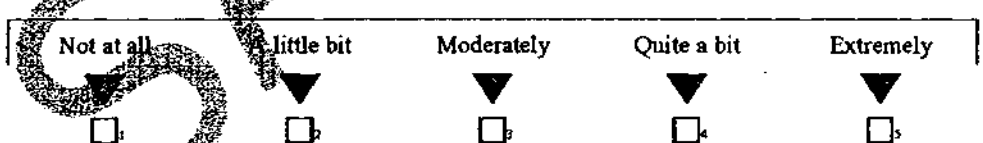
5. **During the <u>past 4 weeks</u>, how much of the time have you had any of the following problems with your work or other regular daily activities <u>as a result of any emotional problems</u> (such as feeling depressed or anxious)?**

	All of the time	Most of the time	Some of the time	A little of the time	None of the time
a. Cut down on the <u>amount of time</u> you spent on work or other activities	1	2	3	4	5
b. <u>Accomplished less</u> than you would like	1	2	3	4	5
c. Did work or other activities <u>less carefully than usual</u>	1	2	3	4	5

6. **During the <u>past 4 weeks</u>, to what extent has your physical health or emotional problems interfered with your normal social activities with family, friends, neighbors, or groups?**

7. **How much <u>bodily</u> pain have you had during the <u>past 4 weeks</u>?**

8. **During the <u>past 4 weeks</u>, how much did <u>pain</u> interfere with your normal work (including both work outside the home and housework)?**



9. **These questions are about how you feel and how things have been with you during the past 4 weeks. For each question, please give the one answer that comes closest to the way you have been feeling. How much of the time during the past 4 weeks...**

	All of the time	Most of the time	Some of the time	A little of the time	None of the time
a. Did you feel full of life?	☐1	☐2	☐3	☐4	☐5
b. Have you been very nervous?	☐1	☐2	☐3	☐4	☐5
c. Have you felt so down in the dumps that nothing could cheer you up?	☐1	☐2	☐3	☐4	☐5
d. Have you felt calm and peaceful?	☐1	☐2	☐3	☐4	☐5
e. Did you have a lot of energy?	☐1	☐2	☐3	☐4	☐5
f. Have you felt downhearted and depressed?	☐1	☐2	☐3	☐4	☐5
g. Did you feel worn out?	☐1	☐2	☐3	☐4	☐5
h. Have you been happy?	☐1	☐2	☐3	☐4	☐5
i. Did you feel tired?	☐1	☐2	☐3	☐4	☐5

10. **During the past 4 weeks, how much of the time has your physical health or emotional problems interfered with your social activities (like visiting friends, relatives, etc.)?**

All of the time	Most of the time	Some of the time	A little of the time	None of the time
☐1	☐2	☐3	☐4	☐5

11. How TRUE or FALSE is <u>each</u> of the following statements for you?

	Definitely true	Mostly true	Don't know	Mostly false	Definitely false
a. I seem to get sick a little easier than other people	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
b. I am as healthy as anybody I know	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
c. I expect my health to get worse	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
d. My health is excellent	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5

THANK YOU FOR COMPLETING THESE QUESTIONS!